

Wireless LAN PC Card (2.4 GHz/5 GHz IEEE 802.11a/b/g)

Quick Start Guide

Before reading this guide, be sure to read the “Read This First” supplement.

This guide explains how to install the software required to use the Wireless LAN PC Card (2.4 GHz/5 GHz IEEE 802.11a/b/g) PCWA-C800S and the necessary settings to establish a connection with the access point.

VAIO CarrierGate

PCWA-C800S

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Overview

The Wireless LAN PC Card (2.4 GHz/5 GHz IEEE 802.11a/b/g) PCWA-C800S is a wireless network PC card that allows your computer to connect to a wireless network and the Internet. With this card, you can build a wireless LAN.

This guide explains how to use the supplied CD-ROM to install the Wireless LAN PC Card device driver and Wireless Panel software.

Step 1 Installing the Software



Step 2 Customizing the Access Point Connection Settings

The procedure in step 2 varies according to your operating system. Refer to the section that pertains your operating system.

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- In this document, the Wireless LAN PC Card (2.4 GHz/5 GHz IEEE 802.11a/b/g) PCWA-C800S is referred to as the Wireless LAN PC Card.
- In this document, Microsoft® Windows® 2000 Professional is referred to as Windows 2000, Microsoft® Windows® XP Professional and Microsoft® Windows® XP Home Edition are referred to as Windows XP.

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<http://www.sony.net/>

Step 1 Installing the Software

The installation procedure is performed with an easy-to-use wizard. Before you start, verify the following.

- The wizard is located on the CD-ROM supplied with the Wireless LAN PC Card. Make sure that your CD-ROM drive is ready for use.
- When using the Wireless LAN PC Card in the Access Point Network connection mode, you must install the access point and make the necessary settings before proceeding. For details about these procedures, refer to the documentation provided with your access point.

Notes

- To install the supplied software on a computer running the Windows 2000 operating system, log on as a user listed in “Administrators”. To install the supplied software on a computer running the Windows XP operating system, log on as a user with administrator access privileges. You cannot install the software or modify settings when logged on as any other user.
- To change any of the Wireless Panel software settings on a computer running the Windows 2000 operating system, log on as a user listed in “Administrators”. You cannot modify settings when logged on as any other user.
- Exit all other programs.

Important

Computer Firewall Functions

When using the Windows XP “Internet Connection Firewall” function

Enabling the Windows XP “Internet Connection Firewall” function may prevent your computer from accessing a wireless network. (By default, this function is disabled on computers running the Windows XP operating system.) If this function is enabled, your computer may not be able to connect to your network when you change your access point settings. If this happens, disable the “Internet Connection Firewall” function, connect to the network, and then re-enable the function. For details, refer to Windows XP Help.

Note

Network security is an important issue. Consider carefully how best to protect your computer.

When using a personal firewall function provided by virus scanning or network security software

Virus scanning and network security software sometimes includes a function called a “personal firewall” that prevents illegal access by outside entities. Depending on the software, the security level of this function may be initially set to a high level. If this high security level setting is left in effect, it may be impossible for an outside entity to access your computer. This can cause problems such as not being able to connect to the network when changing the access point’s settings. In this event, lower the security level to permit the network connection. For details, refer to the documentation provided with your software.

Notes

- Pay special attention to security issues.
- For questions regarding firewall functions, contact your firewall software manufacturer.

- When using the Wireless LAN PC Card in the Access Point Network connection mode, turn on the access point.



Hint

The Access Point Network connection mode is used when building a network around an access point (sold separately). The Peer to Peer Network connection mode is used when a network is composed mainly of computers with wireless capabilities (i.e. that do not need to connect through an access point).

- Insert the supplied CD-ROM into the CD-ROM drive of your computer.

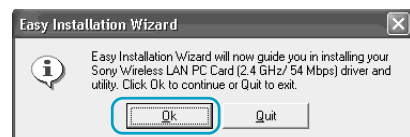
The Easy Installation Wizard starts automatically.



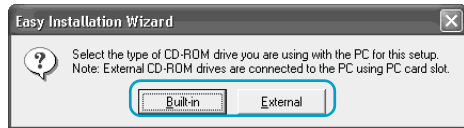
Hint

If the Easy Installation Wizard does not appear when you insert the supplied CD-ROM into your CD-ROM drive, double-click “Setup.exe” () on the CD-ROM. Depending on the settings of your computer, the file name may be “Setup”.

- When the following message appears, click “OK”.



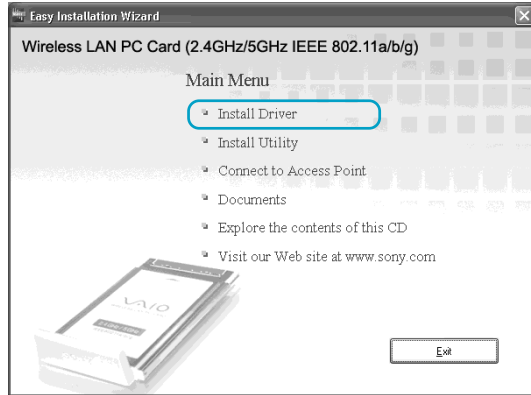
- If your computer is equipped with an internal CD-ROM drive, click “Built-in”. If not, click “External”.



If you are using an external CD-ROM drive, follow the instructions on the screen and copy the contents of the CD-ROM to your hard disk. When the copy is complete, click “Main Menu”.

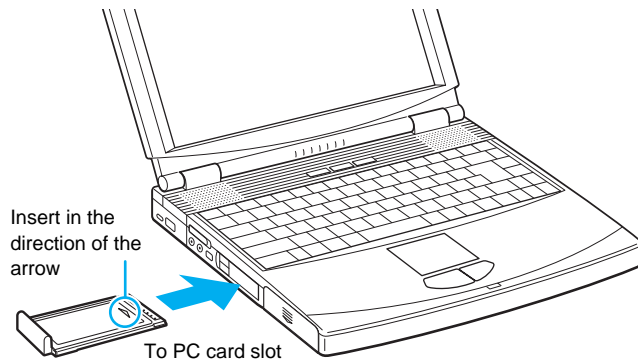
The Main Menu of the Easy Installation Wizard appears.

- Click “Install Driver”.



- When prompted, insert the Wireless LAN PC Card in the PC card slot.

You do not need to turn off your computer when you insert the Wireless LAN PC Card.



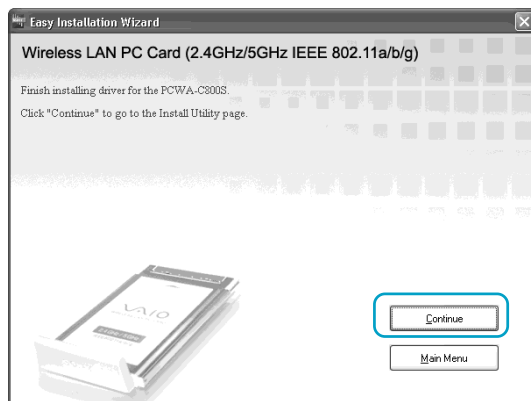
Notes

- If your computer has two PC card slots, insert the Wireless LAN PC Card into the top slot. If inserted into the bottom slot, the antenna of the Wireless LAN PC Card will block the top slot.
- Depending on the depth and configuration of the PC card slots on your computer, you may not be able to fully insert the Wireless LAN PC Card.

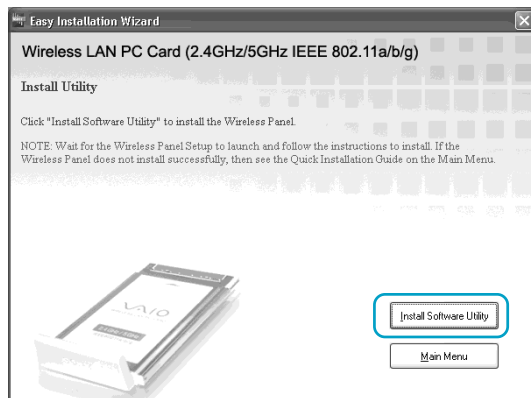
Push the Wireless LAN PC Card into the slot until it is firmly seated. If the card does not fit easily, do not force it in. Take the card out, and then try reinserting it.

When you insert the Wireless LAN PC Card, the device driver is installed automatically. Wait until the installation is complete.

- When installation is complete, the following screen appears. Click “Continue” to install the utility software.



- Click “Install Software Utility”.



The utility software installation starts.

- Follow the instructions on the screen to complete the installation.



Once the Wireless Panel software is installed, appears on the Windows operating system taskbar.

What to do next

Make access point connection settings.

When using the Windows 2000 operating system, proceed overleaf.

When using the Windows XP operating system, click “Main Menu” as necessary to return to the first screen of the wizard, or click to close the Easy Installation Wizard, and then proceed overleaf.

To remove the Wireless LAN PC Card

- Quit any software accessing the wireless LAN (e.g. Internet Explorer).
- Click on the Windows operating system taskbar.
- Click “Safely remove Sony 802.11a/b/g Wireless LAN Adapter” or “Stop Sony 802.11a/b/g Wireless LAN Adapter” on the shortcut menu that appears.

If your computer has several PC card slots

If you insert the Wireless LAN PC Card into a slot other than the one you usually use, the computer treats the card as a new device and automatically begins installing device drivers for it. Completing the driver installation makes it possible to use the Wireless LAN PC Card in that slot. Installation is performed automatically by the installation wizard.



Hint

If you are using the Windows 2000 operating system, you can register up to 32 networks for each PC card slot, but you have to register each network individually. You cannot share the settings across slots.

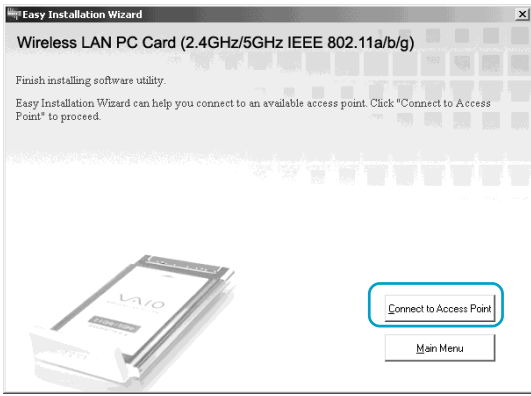
Step 2 Customizing the Access Point Connection Settings

After installing the necessary software, customize the necessary settings to establish a connection with the access point.

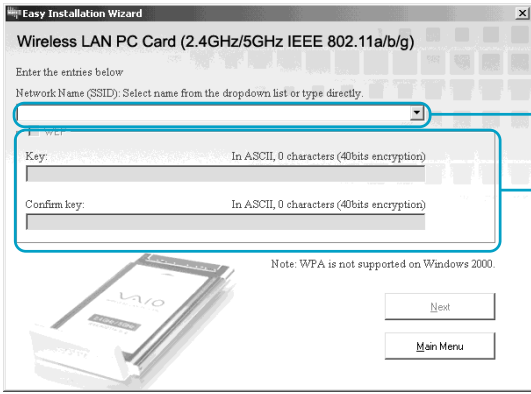
If you want to establish a connection in Peer to Peer Network connection mode, refer to the Wireless Panel Help for details about the necessary settings.

Windows 2000 Operating System

1 Click “Connect to Access Point”.



2 Enter a network name and encryption key.



① Network Name (SSID)

This unique ID is used to identify wireless networks. The setting can be made individually for Access Point Network connection mode and Peer to Peer Network connection mode.

When connecting to an existing network, consult your network administrator regarding the proper settings. When changing an existing network name, you can use up to 32 alphanumeric characters (including symbols).

Hints

- Clicking the “Network Name” list shows the network names of any access points within range. You can then select a network name from the list.
- For details about the default network name of the access point, refer to the documentation provided with the access point.

② WEP

If data encryption (WEP) is enabled for the access point to which you want to connect, select this item. When this item is selected, enter the encryption key (WEP key) in the “Key” and “Confirm key” text boxes.

Data encryption prevents unauthorized access to the network. For security reasons, it is strongly recommended that you enable this feature. The setting can be configured individually for Access Point Network connection mode and Peer to Peer Network connection mode. When connecting to an existing network, consult your network administrator regarding the proper settings. For more information, refer to the documentation provided with the access point.

Key

If data encryption (WEP) is enabled for the access point, enter the encryption key (WEP key) here. Because this key functions as a password that enables communication with the network, the key entered here must be exactly the same as the one of the access point. Only computers for which the key has been configured correctly can join the network. The number of characters depends on the “ASCII/Hexadecimal” and “Length” settings (see table below).

	ASCII	Hexadecimal
Permissible characters	Alphanumeric characters	0 to 9, A to F, a to f
Maximum number of characters	5 or 13 characters	10 or 26 characters

Confirm key

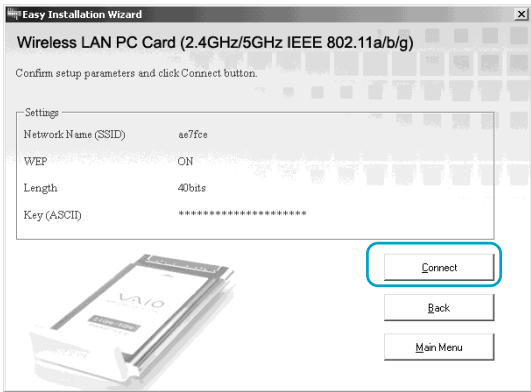
Re-enter the encryption key that you entered in the “Key” text box.

Hint

This product supports a function called “roaming” that allows the creation of a wireless network with multiple access points for wider coverage. When using this function, configure all the access points to the same network name (SSID) and data encryption settings.

3 When you are done, click “Next”.

4 Make sure that the settings are correct, and then click “Connect”.



Wait until the Wireless LAN PC Card connects to the access point. When the Wireless LAN PC Card establishes the connection with the access point, the following screen appears.



This completes the access point connection settings procedure.

Hint

You can change the connection settings and network connection mode from the Wireless Panel software. For details about how to use the Wireless Panel software, refer to the Wireless Panel Help.

Windows XP Operating System

Notes

Before configuring the Wireless LAN PC Card

- If Windows XP Service Pack 1 is not already installed on your computer, Sony recommends downloading and installing it. To verify whether the service pack is installed, click “Start”, and then click “My Computer”. In the “My Computer” window, click “View system information” on the left. The “System Properties” dialog box appears. If the service pack is installed, “Service Pack 1” appears under “System” on the “General” tab of the dialog box.
- Perform the following steps to confirm that the “Use Windows to configure my wireless network settings” check box is selected. This option is selected by default.

- In “Control Panel”, click “Network and Internet Connections”, and then click “Network Connections”.
- If “Network and Internet Connections” does not appear, click “Switch to Category View” on the left.
- Right-click “Wireless Network Connection *” (“*” is a number that differs according to the computer settings), and click “Properties” on the shortcut menu.
- Click the “Wireless Network” tab.
- Confirm that the “Use Windows to configure my wireless network settings” check box is selected. If not, select it.

- You must download and install the Windows XP support patch for Wi-Fi protected access (Q815485_WXP_SP2_x86_ENU.exe) from the Microsoft Web site before you can establish a connection to an access point using the WPA security method. For details about the connection method, refer to the Wireless Panel Help.

1 In “Control Panel”, click “Network and Internet Connections”, and then click “Network Connections”.

The “Network Connections” window appears.

Hint

If “Network and Internet Connections” does not appear, click “Switch to Category View” on the left.

2 Right-click “Wireless Network Connection *” (“*” is a number that differs according to the computer settings), and click “View Available Wireless Networks” on the shortcut menu.

The “Wireless Network Connection” dialog box appears.

Hint

If the computer is not connected to a wireless network, an “x” appears on the “Wireless Network Connection *” icon in the “Network Connections” window.

3 From the “Available Wireless Networks” list in the “Wireless Network Connection” dialog box, select the access point to which you want to connect.

Hint

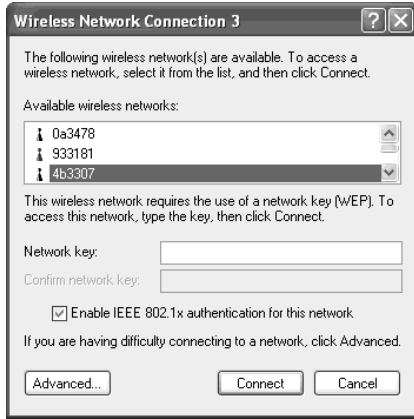
The “Available Wireless Networks” list shows the names of the access points within communication range of the computer. For details about the default network name of your access point, refer to the documentation provided with it. If you think that the network name of your access point may have been changed, consult your network administrator.

4 Depending on the data encryption settings of the access point, proceed as follows.

- Data encryption at the selected access point is enabled
Enter the encryption key in the “Network key” text box. (The input is shown only as asterisks.) For verification, enter the same string one more time in the “Confirm network key” text box.
The encryption key must be exactly the same as the one of the access point. Permissible characters and their maximum number are detailed below.

When using WEP

	ASCII	Hexadecimal
Permissible characters	Alphanumeric characters	0 to 9, A to F, a to f
Maximum number of characters	5 or 13 characters	10 or 26 characters



- Data encryption at the selected access point is disabled
Select the “Allow me to connect to the selected wireless network, even though it is not secure” check box. (For security reasons, enabling data encryption is recommended.)



Hints

- ASCII and hexadecimal characters are automatically identified.
- The data encryption function prevents unauthorized access to the network. When the function is enabled, only computers configured with the correct encryption key can join the network. For security reasons, it is strongly recommended that you enable this feature. The setting can be customized for the Access Point Network connection mode and Peer to Peer Network connection mode. When connecting to an existing network, consult your network administrator regarding the proper settings. For information on how to control this setting at the access point, refer to the documentation provided with the access point.
- To establish a connection to an access point using the WPA security method, refer to the Wireless Panel Help.

5 Click “Connect”.

The connection to the access point is established.

If the access point is already configured, the setup procedure is complete.

If you want to change the access point settings, refer to the documentation provided with the access point.

Note

To use an access point to connect to the Internet, you must change the access point default settings.

Hint

For additional information on the wireless network capabilities of the Windows XP operating system, refer to Windows XP “Help and Support”. (Click “Start”, and then click “Help and Support”. Enter “wireless” in the “Search” text box, and then click the green arrow.) You can also consult the Windows XP operating system documentation.

Using the Wireless Panel Software

The Wireless Panel software shows information about the communication status of the computer connected to the wireless network. Normally, the Wireless Panel runs in the background and only shows the radio signal condition with the signal level indicator on your Windows operating system taskbar. The Wireless Panel window contains more detailed information. When running under the windows 2000 operating system, communication setup and network switching are also performed with the Wireless Panel software.

Notes

- To use the Wireless Panel software with the Windows 2000 operating system to modify communication settings, log on as a user listed in “Administrators”. You cannot modify settings when logged on as any other user.
- On a computer running the Windows XP operating system, communication setup and network switching are not performed with the Wireless Panel software but with built-in functions of the Windows XP operating system. However, the Wireless Panel software can be used to check the communication status.

Signal Level Indicator

The communication status is shown by the signal level indicator on your Windows operating system taskbar.

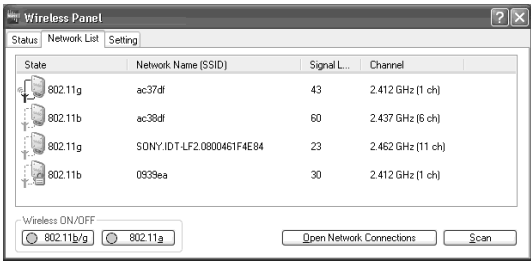


Meaning of the indicator

	Excellent
	Good
	Poor
	Out of range or not connected
	Card not inserted (The Wireless LAN PC Card is not correctly inserted or it is not detected by the computer)
	Peer to Peer (Communicating in Peer to Peer Network connection mode)

Opening the Wireless Panel Window

To open the Wireless Panel window, double-click the signal level indicator on your Windows operating system taskbar. The Wireless Panel window appears.



Hints

- When you move the mouse pointer over an item in the Wireless Panel window, a short description of that item appears.
- For details about how to use the Wireless Panel software, refer to the Wireless Panel Help.