

2.4GHz Wireless LAN Access Point (Bridge Type)

Quick Start Guide

Before reading this guide, be sure to read the supplement entitled "Read This First."

This guide provides an overview of the functions of the 2.4GHz Wireless LAN Access Point PCWA-A220, and explains the preparations that are necessary before the Access Point can be put into operation.

CarrierGate

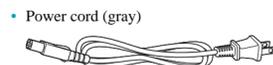
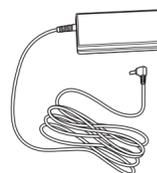
PCWA-A220

Sony Corporation ©2002 Printed in Japan

Unpacking

Once you have unpacked the unit, make sure that all of the following items are present:

- Access Point
- AC adapter



- Ethernet cable (straight-through)
- CD-ROM (Setup disc)
- Read This First
- Quick Start Guide (this manual)
- Troubleshooting Guide
- Limited Warranty
- One set of printed materials

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Capabilities

Wireless access to the Internet from a variety of locations

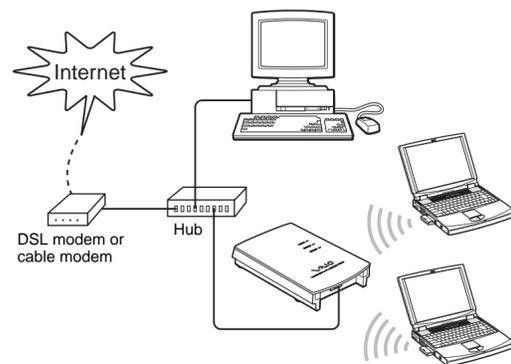
The Wireless LAN Access Point PCWA-A220 (hereafter referred to as the Access Point) is an IEEE 802.11b-compliant bridge-type 2.4 GHz wireless LAN access point. You can use the Access Point as a base station to construct a wireless LAN environment with computers that contain a wireless LAN PC card.

If you want to enable the computers that are connected to the wireless LAN to access the Internet, simply connect the Access Point to a DSL modem, cable modem, ISDN router, broadband router or another similar communication device, or to an Ethernet LAN (wired LAN) that is connected to the Internet.

Notes

- Use an Ethernet cable to connect the Access Point to the communication device. You cannot use a USB connection to connect the Access Point to a communication device.
- To set up the Access Point, there must be two or more available IP addresses in the network where the Access Point is connected.

Connection sample 1:



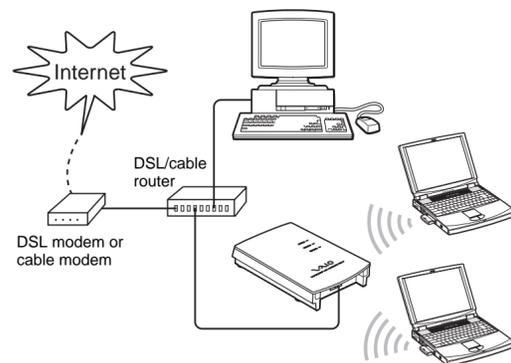
DSL broadband: Should have separate account and install the DSL dialup software (PPPoE) on each computer or obtain each IP address for each computer.

– Contact your DSL provider to obtain additional account/information.

Cable modem broadband: Should have each specific IP address for each computer.

– Contact your cable modem provider to obtain additional IP addresses/information.

Connection sample 2:

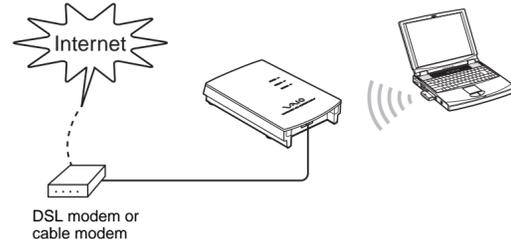


DSL or cable modem broadband: Would work with only one DSL (Except AOL-DSL) or cable modem broadband account.

– Contact your broadband provider to obtain correct information and IP address.

– Proper settings and connecting to DSL or cable modem broadband in DSL/cable modem router.

Connection sample 3:



DSL or cable modem broadband (on computer):

– Install the DSL dialup software (DSL-PPPoE) or setting correct IP address (cable modem) on computer.

– Straight-through Ethernet cable.

Procedures to Installing, Connecting, and Setting Up

Installing the Access Point

Procedure 1 Preparation

Verify your computer's configuration and connection type.

Procedure 2 Install the Access Point

Install the Access Point, connect it to a DSL modem, cable modem, ISDN router, or broadband router, or to an Ethernet LAN, and then turn the power on.

Establishing a Wireless Connection

Procedure 3 Establish communication between the computer and the Access Point

Configure wireless communication settings for your computer, and establish wireless communication with the Access Point under the default settings. *Although communication is possible under the default settings, from a security standpoint it is best to also perform the following procedures and change the default settings.*

Configuring the Access Point

Procedure 4 Install the utility software

Use the CD-ROM provided to install the utility software that searches for the Access Point.

Procedure 5 Change the Access Point settings

Use the newly installed utility software to change the Access Point settings.

Procedure 6 Change the computer settings

Change the computer's wireless communication settings in accordance with the new Access Point settings that were changed in procedure 5.

Hint

In this guide, each procedure is preceded by a check box. After you complete each procedure, confirm that you have performed all of the necessary tasks described in that procedure, and then check off the check box before proceeding to the next procedure.

Example:

Procedure 1

Installing the Access Point

Procedure 1

Preparation

Complete the following preparations before setting up the Access Point.

Set up your wireless LAN PC card.

Install the wireless LAN PC card in the computer, and then install any device drivers and utility software that are necessary in order to use the wireless LAN PC card.

For details, refer to the instruction manual provided with the wireless LAN PC card.

Confirm the method to be used for making the wireless connection between your computer and the Access Point.

Confirm the method to be used for making the wireless connection between the computer in which the PC card is installed and the Access Point.

For details, refer to the instruction manual provided with the wireless LAN PC card. (Specific settings are explained in procedure 3.)

Confirm the method to be used for connecting the Access Point to the DSL modem, cable modem, ISDN router, or broadband router, or to an Ethernet LAN.

Make the connection using either a straight or a crossed Ethernet cable. When connecting to a communication device, use the same type of cable as when connecting the communication device directly to the computer.

Hints

- For details on the type of cable to use when connecting the Access Point to a communication device, refer to the instruction manual for the communication device.
- The Ethernet cable that is provided with the Access Point is a straight-through cable. If a cross-over cable is needed, you must obtain it separately.
- To set up the Access Point, there must be two or more available IP addresses in the network where the Access Point is connected.

Adjust your computer's firewall settings

If you are using the Windows XP Internet Connection Firewall or a personal firewall function provided by virus scanning software, it may be necessary to adjust the security level setting. Refer to the note found at the end of this manual on "Computer Firewall Functions."

Procedure 2

Install the Access Point

Installation

Install the Access Point in a stable location where it will not tip over or fall.

Notes

- Install the Access Point on a stable surface.
- Do not install it on a shelf or other place where jarring or vibration might cause it to fall.
- Do not install the Access Point in any location where passers-by might accidentally come in contact with the Access Point or its cabling.
- When installing the Access Point, be sure to read the "Read This First" supplement as well.

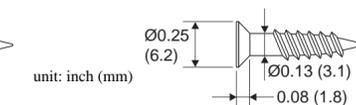
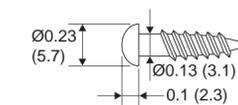
If you hang the Access Point on a Wall...

You can use the mounting holes on the bottom of the access point to hang the Access Point on screws or nails in a wall.

There are no mounting brackets provided with the Access Point. Use sturdy screws or nails that will be able to bear the weight of the Access Point.

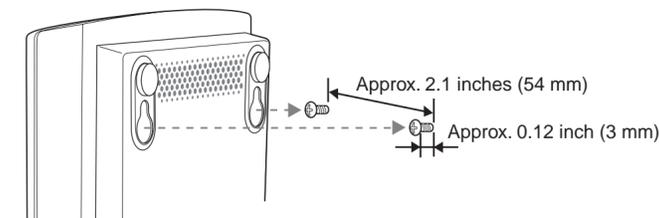
Recommended screws

- Roundhead screws (shaft diameter 0.13 inch (3.1 mm))
- Flathead screws (shaft diameter 0.13 inch (3.1 mm))



Notes

- Using two screws or other fasteners, ensure that the Access Point is securely set on the wall. When fastening the Access Point to a wall with screws, retighten them after mounting the Access Point.
- Select a location that will hold the weight of the Access Point when mounting it on the wall. If the location cannot hold the weight of the Access Point, the Access Point may drop and cause an accident.
- When mounting the Access Point on walls made of plasterboard or other fragile material, make sure that the material is strong enough to support the unit's weight and use special screw fasteners or other fixtures that are made for use with that material. If the unit is fastened with ordinary screws, there is a danger that it may fall.
- When mounting the Access Point on the wall, be careful not to drop the Access Point or the tools used for doing the work. Dropping the unit or tools could result in unforeseeable accidents.



Connecting to a DSL modem, cable modem, ISDN router, or broadband router, or to an Ethernet LAN

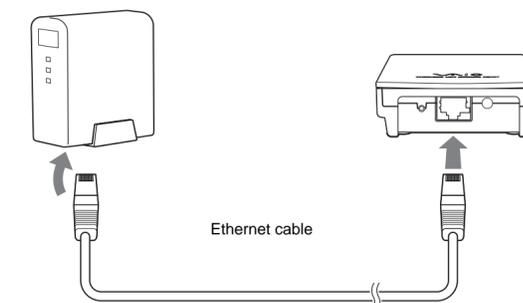
- 1 Connect your DSL modem, cable modem, ISDN router, broadband router or an Ethernet LAN hub to the NETWORK connector on the Access Point using an Ethernet cable as shown below.

Note

Make the connection using either a straight-through or a cross-over Ethernet cable. Use the same type of cable as when connecting a communication device directly to the computer. For details on what cable to use, refer to the instruction manual for the communication device that you are using. If you are connecting the Access Point to an Ethernet LAN hub, use a straight-through Ethernet cable. (The supplied Ethernet cable is a straight-through cable.)

Hint

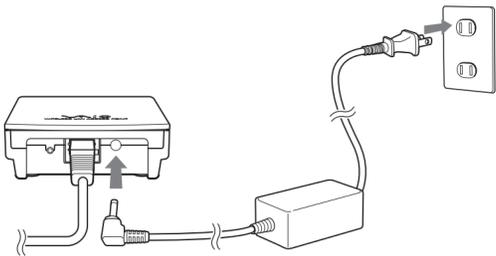
Also see the connection examples outlined in "Capabilities."



- 2 Connect the Access Point to a power outlet.



The Access Point does not have its own power switch.



Notes

- Depending on your communication service provider, it may be necessary to make certain settings in your computer and the connection tool. If such settings are necessary, make them before proceeding to procedure 3.
- To set up the Access Point, there must be two or more available IP addresses in the network where the Access Point is connected.

Establishing a Wireless Connection

Procedure 3

Establish communication between the computer and the Access Point

Configure wireless communication settings for your computer, and establish communication with Access Point. For details on the wireless communication settings for your computer, refer to the instruction manual provided with your wireless LAN PC card. The default settings for Access Point are as follows: Configure the wireless communication settings for your computer in accordance with these default settings.

- Network Name (SSID): default**
- Encryption (WEP): Disabled**



- The manufacturer of your equipment may refer to the network name (SSID) setting as "ESSID," "Network ID" or some similar term.
- The manufacturer of your equipment may refer to the encryption setting as "security" or some similar term.

Although communication is possible under the default settings, from a security standpoint it is best to also perform the following procedures and change the default settings.

Configuring the Access Point

Procedure 4

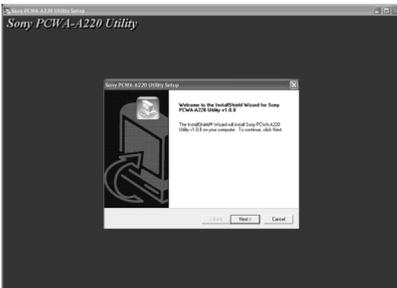
Install the utility software

Install the utility software that searches for the Access Point.

- 1 Insert the supplied CD-ROM into the computer where the wireless LAN PC card is inserted.

- 2 Double-click "Setup.exe" in the CD-ROM.

This launches the Installer program. Follow the onscreen instructions and install the utility software.



Depending on your computer's settings, the file name "Setup.exe" may be displayed as "Setup." If there are multiple files named "Setup" in the same folder, double-click the one with the following icon:



Procedure 5

Change the Access Point settings

Display the Access Point Setup Page in order to configure the Access Point settings.

Compatible browsers:

Internet Explorer 5.0 or later
Netscape Communicator 4.78 or later
Netscape 6.1 or later

Notes

- To display the Access Point Setup Page from the Scan Utility software, set one of the Web browsers above as your computer's default Web browser.
- If your Web browser is configured to use a proxy server, set the browser proxy settings so the browser does not use a proxy server for the Access Point IP address.
- If your computer has multiple network adapters, it is recommended to disable them.



The Access Point Setup Page is saved in the Access Point internal memory.

- 1 Click the "Start" button, point to "Programs" (when using Windows XP, select "All Programs"), "Wireless LAN," "PCWA-A220," and click "Scan Utility".

The Scan Utility starts up, and automatically searches for Access Points on the same network. Once the Scan Utility finishes searching for Access Points, it displays a list of Access Points.



If the Scan Utility does not find any Access Points, move the computer to a location that provides good conditions for wireless communication with the Access Point, and click "Scan" to search again.



- 2 Select the Access Point to which you want to connect from the list of Access Points that were found by the Scan Utility.



If multiple Access Points are shown in the list, check the MAC addresses. Each Access Point's MAC address is printed on a bar code label located near the NETWORK connector on the back of the Access Point. After checking the MAC address, be sure to reconnect the Ethernet cable.

- 3 If the Access Point is connected to an Ethernet LAN that does not operate on a DHCP server, click "IP Address Setup."

If the Access Point is not connected to an Ethernet LAN, or if a DHCP server is running, this operation and step 4 are unnecessary. Proceed to step 5.

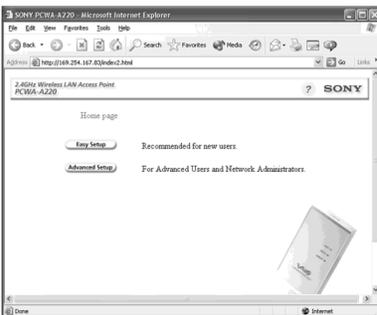
- 4 If you click "IP Address Setup" in step 3, select "Use the following IP address." Enter the IP address, netmask, and default gateway, and click "Execute Setup."



Enter settings that are appropriate for the Ethernet LAN settings. If the network has an administrator, ask the network administrator what settings to use.

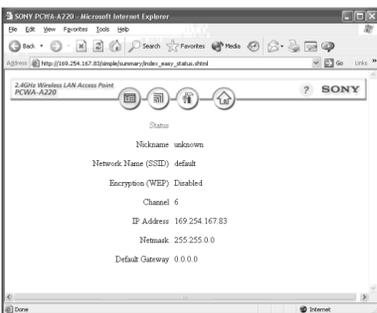
- 5 Click "Access Point Setup Page."

Your Web browser starts and the Access Point Setup Page appears.



- 6 Click "Easy Setup."

The "Status" screen appears.



- 7 Click to display the "Administrator Password Settings" screen.

The "Administrator Password Settings" screen appears.



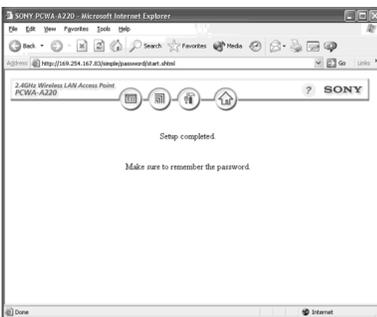
- 8 In the "Administrator Password" field, enter a character string consisting of up to 16 letters, numbers or symbols, and then enter the same string again in the "Administrator Password (Confirmation)" field.

Note

Make a note of the administrator password to make sure that you do not forget it.

- 9 Click "Execute Setup."

The new settings are applied to the Access Point, and the "Setup completed" screen appears.



- 10 Click to display the "Wireless Settings" screen.

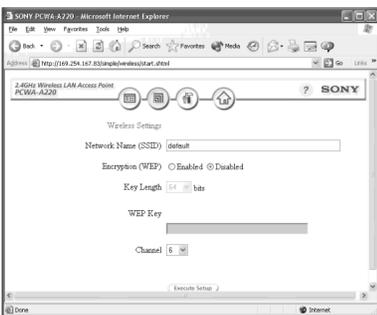
The "Network Password Input" screen appears.

- 11 In the "Password" field, type the administrator password that you set in step 8, and click "OK."

Note

Do not enter anything in the "User Name" field.

The "Wireless Settings" screen appears.



- 12 Enter the Network Name (SSID).

The Network Name (SSID) is an ID that distinguishes the wireless network. Enter a character string of up to 32 letters, numbers, and symbols.

Note

Make a note of the network name to make sure that you do not forget it.

- 13 Select "Enabled" for "Encryption (WEP)" and set "Key Length" to "64."



- "Encryption (WEP)" is an encryption function that prevents unauthorized access to wireless networks, and the WEP key is a password required to decode encrypted transmissions.
- For the sake of this example, it is assumed that "64" (64 bits) is set for the "Key Length," but "128" (128 bits) may also be selected as well. If you are using the PCWA-C100 Wireless LAN PC Card, select "64." (The PCWA-C100 does not support 128-bit encryption keys.)

- 14 Enter the WEP key.

Enter a character string of 5 letters, numbers, and symbols. If "128" was selected for "Key Length," enter a character string of 13 letters, numbers or symbols.

Note

Make a note of the encryption key to make sure that you do not forget it.

- 15 Click "Execute Setup."

The new settings are applied to the Access Point.

- 16 Close the Web browser.



If you change the wireless settings, the connection with the Access Point will be lost. After finishing procedure 5, read procedure 6 carefully and then establish the connection again.

Procedure 6

Change the computer settings

Change the computer's wireless communication settings in accordance with the new Access Point settings that were changed in procedure 5. For details on how to configure these settings, refer to the instruction manual provided with your wireless LAN PC card.

Once you have changed the computer's settings, you will be able to connect with the Access Point again.

For details on the Access Point settings, refer to the Online Help.

To display Online Help

Click the "Start" button, point to "Programs" (when using Windows XP, select "All Programs"), "Wireless LAN," "PCWA-A220," and click "Online Help."

To configure advanced encryption settings

Select "Advanced Setup" in the Access Point Setup Page and configure the necessary settings. For details, refer to the Online Help.

Note

Computer Firewall Functions

When using Windows XP's "Internet Connection Firewall"

Enabling the Windows XP Internet Connection Firewall may prevent your computer from being recognized by your network. (This feature is disabled under Windows XP's default settings.) If you have enabled this feature and are unable to configure your Access Point or cannot recognize the Access Point that you would like to configure, try disabling the Internet Connection Firewall feature, and try again to communicate with your Access Point.

Note

Network security is an important issue. You are urged to consider carefully how best to protect your computer.

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

Virus scanning software and network security software sometimes includes a function called a "personal firewall" that is designed to prevent 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 in order to permit the network connection. For details, refer to the instruction manual and online help for your software.

Notes

- Pay special attention to security issues.
- For questions regarding Firewall functions, please contact the manufacturer of the firewall software you are using.