



Operating Instructions

Wireless LAN PC Card
PCWA-C100

Owner's Record

The model number of this product is PCWA-C100. Find the serial number attached on the product and record it in the space provided below. Refer to these numbers when you call your Sony dealer.

Model No. PCWA-C100
Serial No. _____

CAUTION

You are cautioned that any changes or modifications not expressly approved in this manual could void your warranty.

NOTE:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio or communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

NOTE:

Install and connect the Access Point following descriptions in its Operation Instructions manual before using it.

About the supplied software

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- In no event will SONY be liable for any financial damage or loss of profits, including claims made by third parties, arising out of the use of the software supplied with this product.
- In the event a problem occurs with this software as a result of defective manufacturing, SONY will replace it at

SONY's option or issue a refund; however, SONY bears no other responsibility.

- The software provided with this product cannot be used with equipment other than that which is designated for use with.
- Please note that, due to continued efforts to improve quality, the software specifications may be changed without notice.

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Safety Information

WARNING

- Opening the unit, for whatever reason, could lead to damages that are not covered by the guarantee.
- To prevent fire or shock hazard, do not expose your Sony Wireless LAN PC Card to rain or moisture.

NOTES:

- The Sony supplied software may show screens slightly different from those included in this manual.
- This manual is written based on the assumption that you are familiar with basic operations of Windows operating system. For computer operations, refer to manuals that come with your computer.

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NOTES:

- The illustrations in this manual may differ from the actual software.
- Explanations in this manual assume that you are familiar with basic operations of Windows. For how to use your computer and operating system, please refer to respective manuals.

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Overview

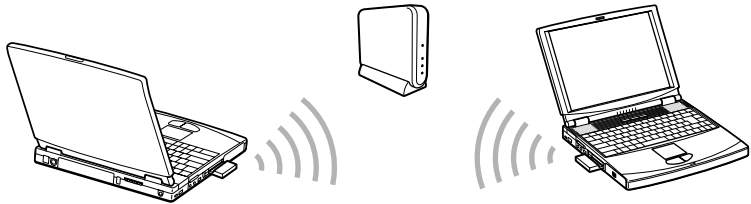
What you can do with your Wireless LAN PC Card

You can build a Wireless LAN (Local Area Network) using the Wireless LAN PC Card, PCWA-C100. The Wireless LAN PC Card can be used with or without the Wireless LAN Access Point, PCWA-A100 (hereinafter referred to as the Access Point). With the Access Point, you can build a wireless LAN between multiple computers that are equipped with the Wireless LAN PC Card and gain access to the Internet. You can achieve direct communication (Peer to Peer mode) between computers without using the Access Point.

Tip

A wireless LAN may have up to 16 computers connected.

Communication through the Access Point



Direct communication between computers (Peer to Peer mode)



About the supplied software

The Wireless LAN PC Card comes with the following software:

- **Wireless Palette:**

You can set up a computer containing the Wireless LAN PC Card for communications with the Access Point, display the communication status, and switch the Access Point currently in use to another when multiple Access Points are present.

- **Basic Access Point Setup Utility (Basic Setup Utility):**

You can set up the Access Point for Internet access. This dialog-driven utility covers basic setups for Internet access.

- **Custom Access Point Setup Utility (Custom Setup Utility):**

You can make advanced configurations of the Access Point. You can specify optional features for Internet access with this utility.

Task flow

To build a wireless LAN environment, you must configure both the Access Point and the Wireless LAN PC Card.

Required tasks depend on the state of your Access Point and Wireless LAN PC Card. The table below lists their states and tasks required for building a wireless LAN environment.

		Wireless LAN PC Card	
		New	In use
Access Point	New	<ol style="list-style-type: none"> 1. Connect the Access Point. (*1) 2. Insert the Wireless LAN PC Card into a computer, set up the Windows environment and install software. (*2) 3. Register the Access Point using the Wireless Palette. (*3) 4. Configure the Access Point using the Basic Setup Utility. (*4) 	<ol style="list-style-type: none"> 1. Connect the Access Point. (*1) 2. Register the Access Point using the Wireless Palette. (*3) 3. Configure the Access Point using the Basic Setup Utility. (*4)
	In use	<ol style="list-style-type: none"> 1. Insert the Wireless LAN PC Card into a computer, set up the Windows environment and install software. (*2) 2. Register the Access Point using the Wireless Palette. (*3) 	<ul style="list-style-type: none"> • To communicate with an Access Point previously used in another wireless LAN environment from a computer containing the Wireless LAN PC Card. <ol style="list-style-type: none"> 1. Register the Access Point using the Wireless Palette. (*4)

*1 See Connections in the Access Point Operating Instructions manual.

*2 See Inserting the Wireless LAN PC Card and succeeding sections in this manual.

*3 See To establish communication with the Access Point and succeeding sections in this manual. For further information, see the Wireless Palette Help files.

*4 See Setting up the Access Point and succeeding sections in this manual.

System requirements

- Sony VAIO® series personal computers
 - CPU: MMX® Pentium® 233 MHz and above
 - RAM: 64 MB and above
 - CD-ROM drive
 - Default built-in PCMCIA Type II slot
- Operating system: For best results, use a computer with one of the preinstalled (not upgraded versions) operating systems below.
 - Microsoft® Windows® 98 Second Edition, English version
 - Microsoft® Windows® 2000 Professional, English version
- Display: SVGA (800 x 600 pixels) and above (supports High Color (16 bit) and above)

Notes

- Sony does not assure trouble-free operation for all computers satisfying these system requirements.
- The Wireless LAN Access Point PCWA-A100 is required to gain access to the Internet.
- An Internet Service Provider (ISP) is required for Internet access.

About this manual

Note

Install and connect the Access Point, as described in its Operating Instructions manual.

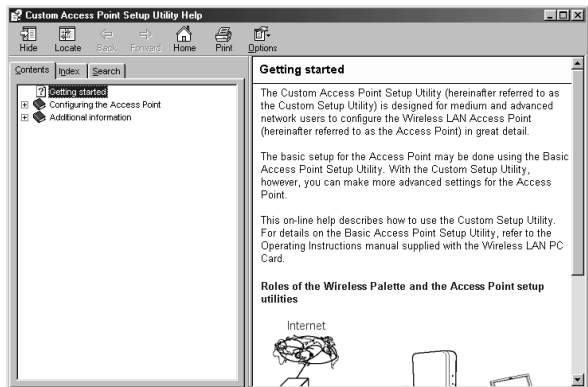
This manual explains the operation of the Wireless LAN PC Card and the installation and setup of the supplied software. For details on using the Wireless Palette and the Custom Setup Utility software supplied with the Wireless LAN PC Card, refer to the software's on-line Help files.

The Wireless LAN PC Card has two on-line Help files:

- Wireless Palette Help
- Custom Access Point Setup Utility Help

Opening the Help files

- Wireless Palette Help
 - From the Start menu, click VAIO - Wireless LAN - Wireless Palette Help.
- Custom Access Point Setup Utility Help
 - From the start menu, click VAIO - Wireless LAN - Custom Access Point Setup Utility Help.



Selecting a topic from the contents

From the Contents list, select the desired topic.

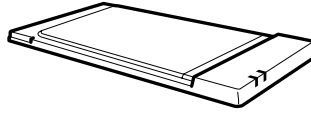
Searching using a Keyword

- 1** To search using a Keyword, select the Index tab from the Help dialog box.
The Keyword list appears.
- 2** Enter the keyword you want to apply, or scroll the Keyword list.
- 3** Select a topic, then click Display.
Topics related to the Keyword appears.

Unpacking

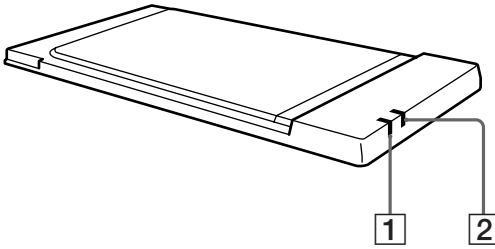
Your Wireless LAN PC Card comes with the following items.

- Wireless LAN PC Card (1)



- PC card case (1)
- CD-ROM (Setup disk) (1)
- Operating Instructions (1)
- END-USER LICENSE AGREEMENT (1)
- Other printed materials

Indicators



1 DATA indicator

Lights up while data exchange is in progress.

2 LINK indicator

Lights up while your computer is connected to the wireless LAN.

Description on the indicators

DATA	LINK	Description
Flashing (green)	Lit (green)	Normal communications.
Fast Flashing (green)	Lit (green)	Peer to Peer mode
Off	Lit (green)	The PC card is powered, but no communication is taking place.
Flashing at 10sec intervals		The PC card is operating, but no connection is established.
Off		The PC card is powered off.

Inserting the Wireless LAN PC Card

Notes

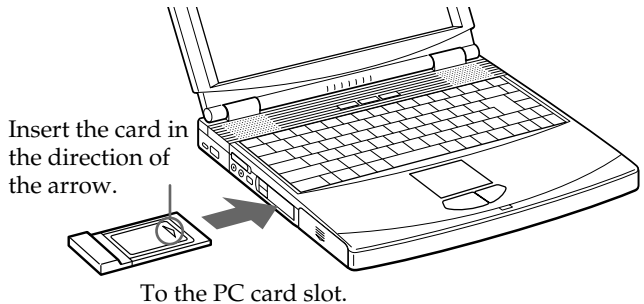
- If your computer has two PC card slots, insert the Wireless LAN PC Card into the top slot. Inserting it into the bottom slot blocks the top slot with its antenna.
- If your computer is the PCG-Z505 series, you cannot insert or remove the **Memory Stick** media into or from the **Memory Stick** slot while the Wireless LAN PC Card is inserted.
- Before using the Wireless LAN PC Card, turn off System Suspend mode or System Hibernation mode using the PowerPanel software. While the computer is in System Suspend mode or System Hibernation mode, the Wireless LAN PC Card may not be recognized when it is removed and reinserted.

If you are inserting the Wireless LAN PC Card for the first time, install the driver software before inserting the Wireless LAN PC Card. See Installing the driver software on page 13 for details.

This section explains how to insert and remove the Wireless LAN PC Card to your computer.

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

- 1** Remove the PC card slot protector from the computer.
(Some computers contain the card slot protector to prevent damage to the slot while not in use.)
- 2** Insert the Wireless LAN PC Card into the PC card slot.
Push the Wireless LAN PC Card into the slot until it is firmly seated. Inserting the card will extend the eject button.
If the card does not fit easily, do not force it in. Take the card out and try reinserting.



To remove the Wireless LAN PC Card

- 1** Close the software that uses the wireless LAN.
- 2** Stop PC Card Services on the system tray and/or Control Panel.
- 3** Remove the Wireless LAN PC Card, following the instructions in your computer's manual.

Installing the driver software

Notes

- If your operating system is Windows 2000, you must log onto your system with Administrator privileges.
 - If your computer has only one PC card slot, and your CD-ROM drive must be connected through it, copy the Wireless LAN folder from the Sony-supplied CD-ROM into the hard disk before inserting the Wireless LAN PC Card. The following uses C:\Temp folder as an example.
If you can use the CD-ROM drive while the Wireless LAN PC Card is inserted, the following steps are not required. Begin installation starting from step 1.
- 1 Connect the CD-ROM drive to the computer and insert the Sony-supplied CD-ROM into the drive.
 - 2 Copy the Wireless LAN folder in the CD-ROM to C:\Temp folder with the Windows Explorer.
 - 3 Remove the CD-ROM drive from the PC card slot, then, proceed to step 2.
- If your computer has two PC card slots and your CD-ROM drive must be connected through one of them, connect the CD-ROM drive to the bottom slot.

Install the driver software for the Wireless LAN PC Card. The installation procedure requires the availability of a CD-ROM drive when the Wireless LAN PC Card inserted.

- 1 Insert the supplied CD-ROM into the CD-ROM drive.
- 2 Insert the Wireless LAN PC Card into the PC card slot.

The Add New Hardware Wizard appears.



- 3 Click Next.
- 4 Confirm that "Find an appropriate driver for a device in use." is selected, then click Next.
- 5 Select Specify a search location.

If the internal CD-ROM drive of your computer contains the supplied CD-ROM, select CD-ROM drive.

If the contents of the supplied CD-ROM have been copied onto the hard disk, do the following:

- 1 Check Specify a search location.
- 2 Click Browse.
- 3 Select the copied folder (C:\Temp\WirelessLAN in this example) and click OK.

Note

Restarting the computer takes longer than booting.

6 Click Next to begin search.

7 Click Next to begin driver installation.

Wait for installation to complete. A new display screen appears when installation is complete.

8 Click Finish.

(If your operating system is Windows 98 Second Edition, follow the on-screen instructions to restart the computer.)

To verify driver installation

Windows 98 Second Edition

After the computer restarts, verify that the Wireless LAN PC Card is working properly.

1 From the Start menu, click Settings, then Control Panel.

The Control Panel window appears.

2 Double-click the System icon.

The System Properties dialog box appears.

3 Click the Device Manager tab and check View devices by type.

Note

The Wireless LAN PC Card is not working properly in the following cases:

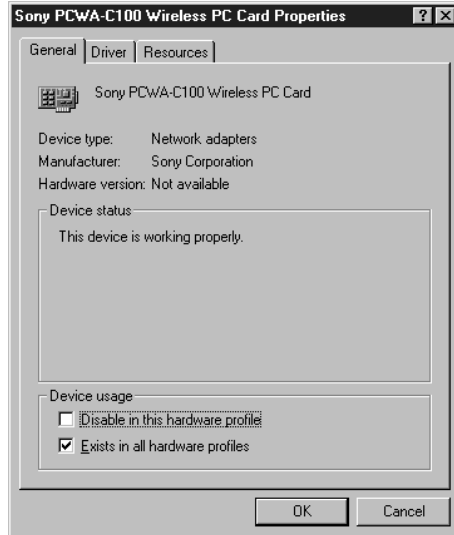
- Sony PCWA-C100 Wireless PC Card is shown with a yellow question or exclamation mark.
 - Click Sony PCWA-C100 Wireless PC Card and click Remove, then repeat from step 2 in Installing the driver software.
- Double-clicking Network Adapters does not display Sony PCWA-C100 Wireless PC Card.
 - Remove the Wireless LAN PC Card, then repeat from step 2 in Installing the driver software.
- Double-clicking Other devices displays Sony PCWA-C100 Wireless PC Card.
 - Click Sony PCWA-C100 Wireless PC Card and Remove, then repeat from step 2 in Installing the driver software.

Note

If a message “This device is working properly.” is not displayed, the Wireless LAN PC Card is not working properly. Click OK then click Remove to remove the driver, then click Yes to restart the computer. When the computer restarts, repeat from step 2 in Installing the driver software.

- 4** Double-click Network adapters, then double-click Sony PCWA-C100 Wireless PC Card.

The Sony PCWA-C100 Wireless PC Card Properties dialog box appears.

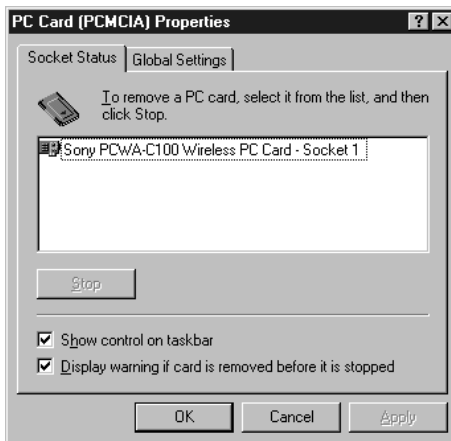


- 5** Confirm that the message “This device is working properly.” is displayed under Device status.

- 6** Click OK.
The System Properties dialog box reappears.

- 7** Click OK.
The Control Panel window reappears.

- 8 Double-click the PC Card (PCMCIA) icon.
The PC Card (PCMCIA) Properties dialog box appears.



Note

If Sony PCWA-C100 Wireless PC Card is not displayed in the PC Card (PCMCIA) Properties dialog box, the Wireless LAN PC Card is not working properly.

Repeat steps 1 through 4 on page 14. Click Sony PCWA-C100 Wireless PC Card then click Remove to remove the driver. Click Yes to restart the computer.

When the computer restarts, repeat from step 2 in Installing the driver software.

- 9 Confirm that Sony PCWA-C100 Wireless PC Card is displayed under Socket Status.
- 10 Click OK.
The PC Card (PCMCIA) Properties dialog box closes.
- 11 Click .
The Control Panel window closes.

Windows 2000

Upon completion of driver installation, verify that the Wireless LAN PC Card is working properly.

- 1 From the Start menu, click Settings, then Control Panel.
The Control Panel window appears.
- 2 Double-click the System icon.
The System dialog box appears.
- 3 Click the Hardware tab, then click Device Manager.

Note

The Wireless LAN PC Card is not working properly in the following cases:

- Sony PCWA-C100 Wireless PC Card is shown with a yellow question or exclamation mark.
 - Click Sony PCWA-C100 Wireless PC Card and Remove, then repeat from step 2 in Installing the driver software.
- Double-clicking Network Adapters does not display Sony PCWA-C100 Wireless PC Card.
 - Remove the Wireless LAN PC Card, then repeat from step 2 in Installing the driver software.
- Double-clicking Other devices displays Sony PCWA-C100 Wireless PC Card.
 - Click Sony PCWA-C100 Wireless PC Card and Remove, then repeat from step 2 in Installing the driver software.

Note

If a message "This device is working properly." is not displayed, the Wireless LAN PC Card is not working properly. Click OK then click Remove to remove the driver, then click Yes to restart the computer. When the computer restarts, repeat from step 2 in Installing the driver software.

- 4 Double-click Network adapters, then double-click Sony PCWA-C100 Wireless PC Card.

The Sony PCWA-C100 Wireless PC Card Properties dialog box appears.



- 5 Confirm a message "This device is working properly." is displayed under Device status.
- 6 Click OK.
The Device Manager window reappears.
- 7 Click .
The System Properties dialog box reappears.
- 8 Click OK.
The Control Panel window reappears.
- 9 Click .
The Control Panel window closes.

Setting up Windows environment

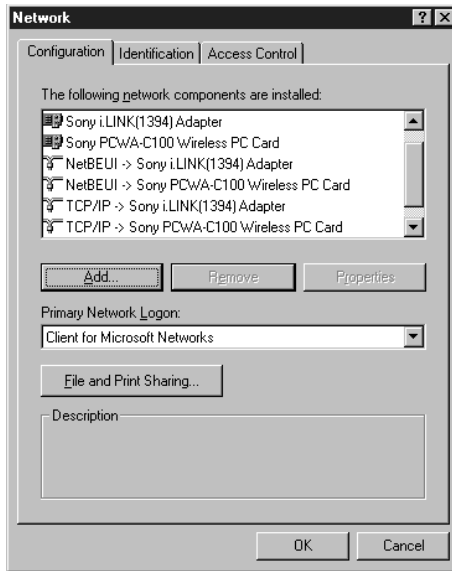
(Windows 98 Second Edition)

Note

If the Version Conflict dialog box appears while you are setting up your Windows environment, click Yes to continue.

To verify the installed network components

- 1 From the Start menu, click Settings - Control Panel.
The Control Panel window appears.
- 2 Double-click the Network icon.
The Network dialog box appears.



3 Click the Configuration tab to verify the settings. Confirm that the following are displayed under "The following network components are installed."

- NetBEUI -> Sony PCWA-C100 Wireless PC Card.
- TCP/IP -> Sony PCWA-C100 Wireless PC Card.
- Client for Microsoft Networks.
- File and printer sharing for Microsoft Networks.

Also confirm that Client for Microsoft Networks is displayed under the Primary Network Logon pull-down menu.

If everything is displayed, proceed to To specify the IP address on page 23.

If any of these components are missing, you must add each component individually.

For further instructions see below.

To add TCP/IP on this page.

To add NetBEUI on page 21.

To add Client for Microsoft Networks on page 21.

To add File and printer sharing for Microsoft Networks on page 22.

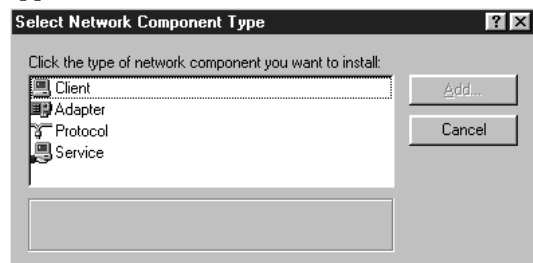
When you have added all components, proceed to To specify the IP address on page 23.

To add TCP/IP

If TCP/IP -> Sony PCWA-C100 Wireless PC Card is not displayed in step 3 above follow the steps below.

1 Click Add on the Configuration tab.

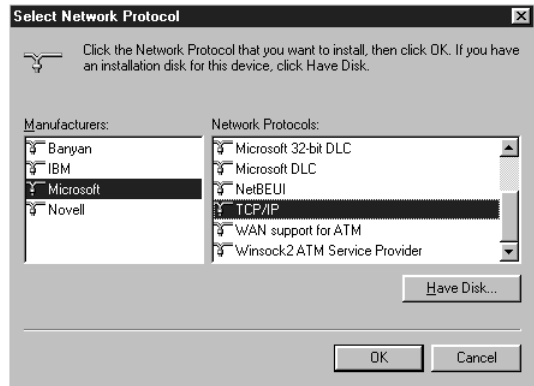
The Select Network Component Type dialog box appears.



2 Click Protocol, then click Add.

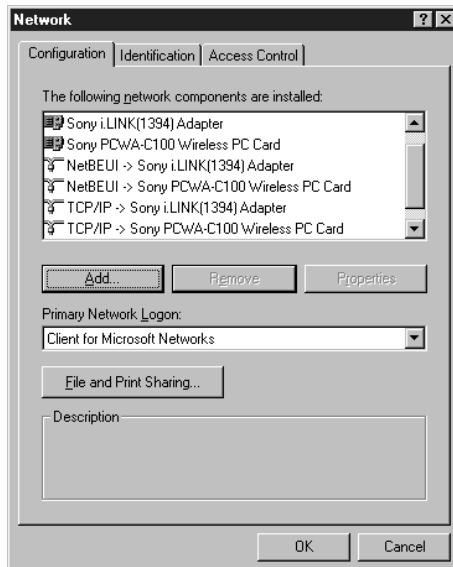
The Select Network Protocol dialog box appears.

3 Select Microsoft in the Manufacturers window, and select TCP/IP in the Network Protocols window.



4 Click OK.

TCP/IP -> Sony PCWA-C100 Wireless PC Card appears under "The following network components are installed."



To add NetBEUI

If NetBEUI -> Sony PCWA-C100 Wireless PC Card is not displayed in step 3 on page 19, follow the steps below.

- 1** Click Add on the Configuration tab.
The Select Network Component Type dialog box appears.
- 2** Click Protocol then click Add.
The Select Network Protocol dialog box appears.
- 3** Click Microsoft under Manufacturers, then click NetBEUI under Network Protocols.
- 4** Click OK.
NetBEUI -> Sony PCWA-C100 Wireless PC Card is added under "The following network components are installed."

To add Client for Microsoft Networks

If Client for Microsoft Networks is not displayed in step 3 on page 19, follow the steps below.

- 1** Click Add on the Configuration tab.
The Select Network Component Type dialog box appears.
- 2** Click Client, then click Add.
The Select Network Client dialog box appears.
- 3** Click Microsoft under Manufacturers, and select Client for Microsoft Networks under Network Clients.
- 4** Click OK.
Client for Microsoft Networks appears under "The following network components are installed."

Note

This setting is required to allow other computers on the same LAN to share files from your computer or the printer connected to your computer.

Print and Filesharing is not recommended while connected to the Internet. Security is an issue and Microsoft warns to disable. Please consider using firewall software.

To add File and printer sharing for Microsoft Networks

If File and printer sharing for Microsoft Networks is not displayed in step 3 on page 19, follow the steps below.

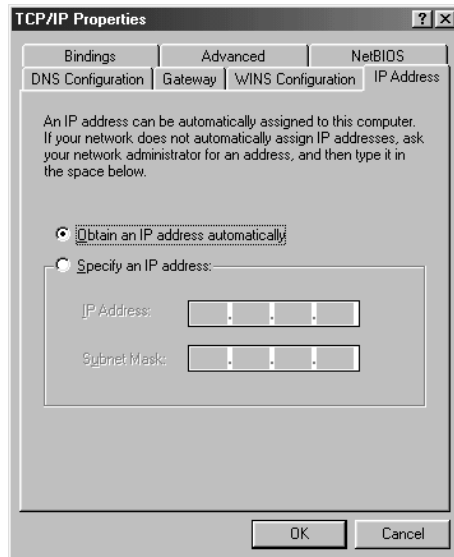
- 1** Click File and Print Sharing on the Configuration tab.
The File and Print Sharing dialog box appears.
- 2** Check "I want to be able to give others access to my files." and "I want to be able to allow others to print to my printer(s)."
- 3** Click OK.
File and printer sharing for Microsoft Networks appears under "The following network components are installed."

When you have added all components, proceed to the next section, To specify the IP address on page 23.

To specify the IP address

- 1 Click TCP/IP -> Sony PCWA-C100 Wireless PC Card, then click Properties on the Network dialog box.

The TCP/IP Properties dialog box appears.



If TCP/IP is not displayed...

Go back to the previous section To add TCP/IP on page 19 to add TCP/IP, then come back here to continue.

- 2 Click Obtain an IP address automatically, then click OK.

The Network dialog box reappears.

Proceed to the next section, To verify the computer name and workgroup on page 24, upon completion of this setting.

Notes

- Assign a unique name of up to 15 alphanumeric characters to every computer connected to the same LAN.
- The workgroup indicates the name of a group sharing files. Assign the same workgroup name for all computers that share files.

Note

Restarting the computer takes longer than booting.

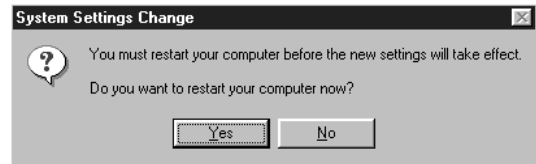
To verify the computer name and workgroup

Computer names are displayed on the status indication windows of the Wireless Palette.

1 Click the Identification Information tab on the Network dialog box and specify the Computer name and Workgroup.

2 Click OK.

The System Settings Change dialog box appears.



3 Click Yes to restart the computer.

Proceed to the next section, To set up sharing on the computer on page 25, on completion of these instructions.

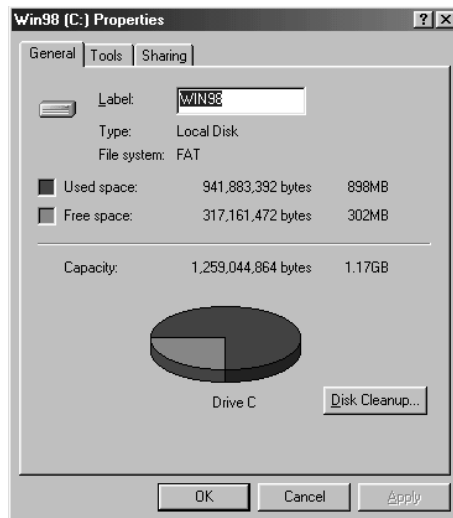
To set up sharing on the computer

You can let other users share drives and folders from your computer on the wireless LAN.

The following information explains how to share Drive C (C:), as an example. You can also set up your computer to share other drives and folder.

- 1 Double-click My Computer on the Windows desktop.
- 2 Right-click the Drive C icon and click Properties.

The Properties dialog box appears.



- 3 Click the Sharing tab and click Shared As.

- 4 Click OK.

C: is available for sharing on the wireless LAN.

If you have accessed to the Internet via the telephone line, proceed to the next section, To change Internet connection settings on page 26 upon completion of this setting.

If you have accessed to the Internet via a cable modem (xDSL modem) or ISDN router, proceed to Installing software on page 40.

Tip

For further information on sharing on the computer, refer to the Windows manual or Help files.

Note

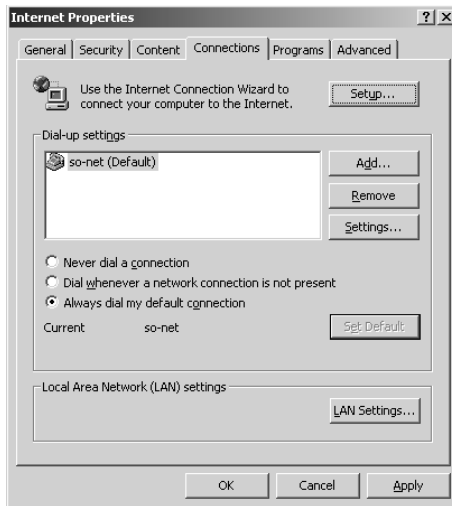
Consider all issues before making any folder available for sharing on the wireless LAN.

To change Internet connection settings

If your Internet access has been via a telephone line, you must change the Internet connection settings.

Microsoft Internet Explorer

- 1 Select Settings - Control Panel from the Start menu.
- 2 Double-click Internet Options.
- 3 Click the Connections tab.

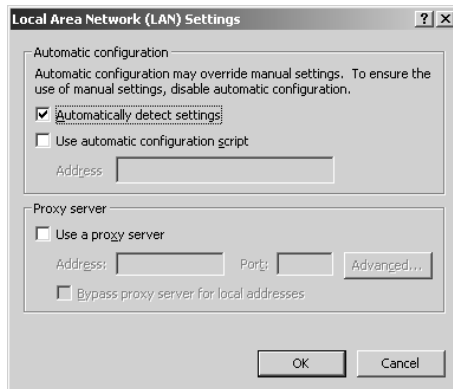


4 Check Never dial a connection.



5 Click LAN Settings.

The Local Area Network (LAN) Settings dialog box appears.



6 Check Automatically detect settings under Automatic configuration.

Make sure the check box for "Use a Proxy Server" is not selected.

7 Click OK.

The Local Area Network (LAN) Settings dialog box closes.

8 Click OK.

The Internet Properties dialog box closes.

9 Click .

The Control Panel window closes.

Upon completion of the above setup, proceed to Installing software on page 40.

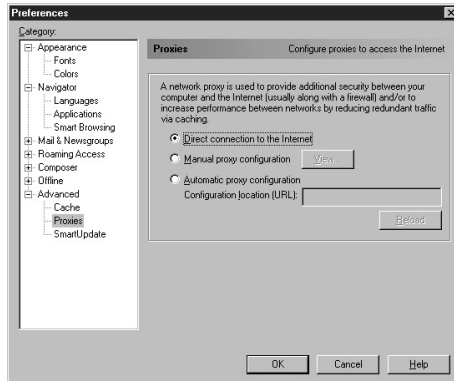
Netscape Communicator

1 Launch Netscape Communicator.

2 Click Preferences from the Edit menu.

3 Click Advanced.

4 Click Proxies, then check “Direct connection to the Internet.”



5 Click OK.

The Preferences dialog box closes.

6 Click Reload in the browser window.

Upon completion of the above setup, proceed to Installing software on page 40.

Setting up Windows environment

(Windows 2000)

Note

When multiple connection environments exist, multiple Local Area Connection icons are displayed.

Locate the icon that pops up as, "Sony PCWA-C100 Wireless PC Card," and double-click it.

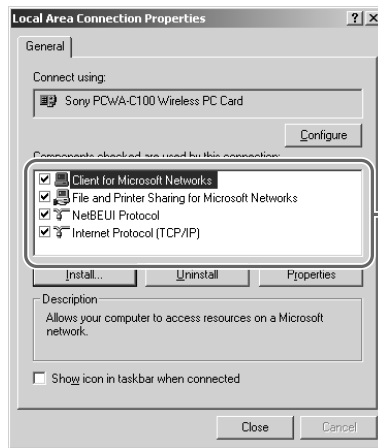
To verify the current network components

- 1 From the Start menu, click Settings, click Network and Dial-up Connections.

The Network and Dial-up Connections window appears.

- 2 Double-click the Local Area Connection icon.

The Local Area Connection Properties dialog box appears.



Component list

Confirm that the following network components are displayed in the component list.

- NetBEUI Protocol.
- Internet Protocol (TCP/IP).
- Client for Microsoft Networks.
- File and Printer Sharing for Microsoft Networks.

If everything is displayed, click Close and proceed to To specify the IP address on page 33.

If any of these components are missing, you must add each component individually.

For further instructions see below.

To add Internet Protocol (TCP/IP) on page 30.

To add NetBEUI Protocol on page 31.

To add Client for Microsoft Networks on page 32.

To add File and printer sharing for Microsoft Networks on page 32.

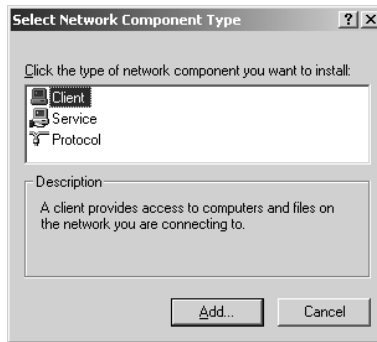
When you have added all components, proceed to To specify the IP address on page 33.

To add Internet Protocol (TCP/IP)

If Internet Protocol (TCP/IP) is not displayed in step 2 on page 29, follow the steps below.

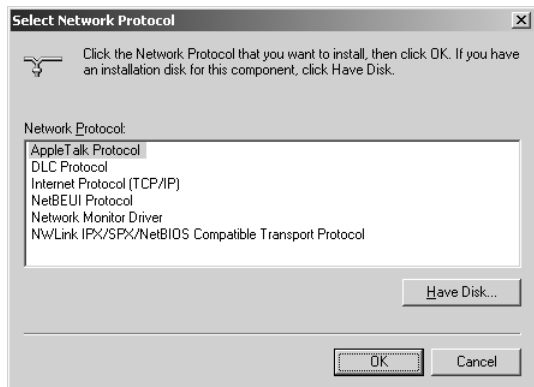
- 1 Click Install from the Local Area Connection Properties dialog box.

The Select Network Component Type dialog box appears.



- 2 Click Protocol, then click Add.

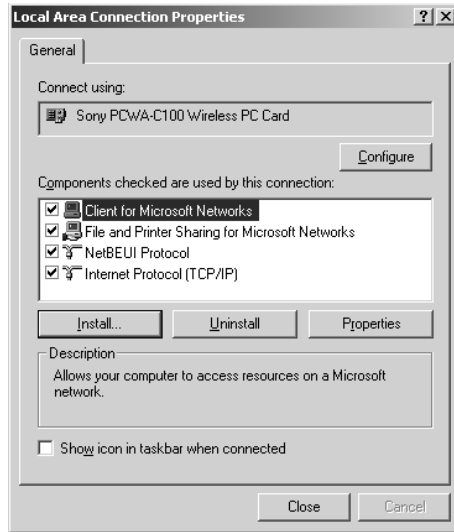
The Select Network Protocol dialog box appears.



- 3 Click Internet Protocol (TCP/IP).

4 Click OK.

Internet Protocol (TCP/IP) is added in the component list.



To add NetBEUI Protocol

If NetBEUI Protocol is not displayed in step 2 on page 29, follow the steps below.

1 Click Install from the Local Area Connection Properties dialog box.

The Select Network Component Type dialog box appears.

2 Click Protocol, then click Add.

The Select Network Protocol dialog box appears.

3 Click NetBEUI Protocol.

4 Click OK.

NetBEUI Protocol is added to the component list.

Note

This setting is required to allow other computers on the same LAN to share files from your computer or the printer connected to your computer. Print and Filesharing is not recommended while connected to the Internet. Security is an issue and Microsoft warns to disable. Please consider using firewall software.

To add Client for Microsoft Networks

If Client for Microsoft Networks is not displayed in step 2 on page 29, follow the steps below.

- 1** Click Install on the Local Area Connection Properties dialog box.
The Select Network Component Type dialog box appears.
- 2** Click Client, then Add.
The Select Network Service dialog box appears.
- 3** Click Client for Microsoft Networks.
- 4** Click OK.
Client for Microsoft Networks is added to the component list.

To add File and printer sharing for Microsoft Networks

If File and printer sharing for Microsoft Networks is not displayed in step 2 on page 29, follow the steps below.

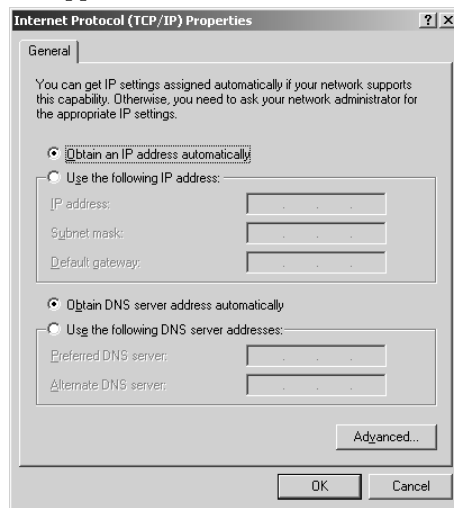
- 1** Click Install on the Local Area Connection Properties dialog box.
The Select Network Component Type dialog box appears.
- 2** Click Service, then click Add.
The Select Network Service dialog box appears.
- 3** Click File and Printer Sharing for Microsoft Networks.
- 4** Click OK.
File and Printer Sharing for Microsoft Networks is added to the component list.

When you have added all components, proceed to the next section, To Specify the IP address on page 33.

To specify the IP address

- 1 Select Internet Protocol (TCP/IP) from the component list of the Local Area Connection Properties, then click Properties.

The Internet Protocol (TCP/IP) Properties dialog box appears.



- 2 Click Obtain an IP address automatically, then click OK.

The Local Area Connection Properties dialog box reappears.

- 3 Click OK.

The Local Area Connection Properties dialog box closes.

- 4 Click .

The Network and Dial-up Connections window closes.

Proceed to the next section, To verify the computer name and workgroup on page 34 upon completion of these instructions.

To verify the computer name and workgroup

Computer names are displayed on the status indication window of the Wireless Palette.

- 1 From the Start menu, click Settings, then click Control Panel.

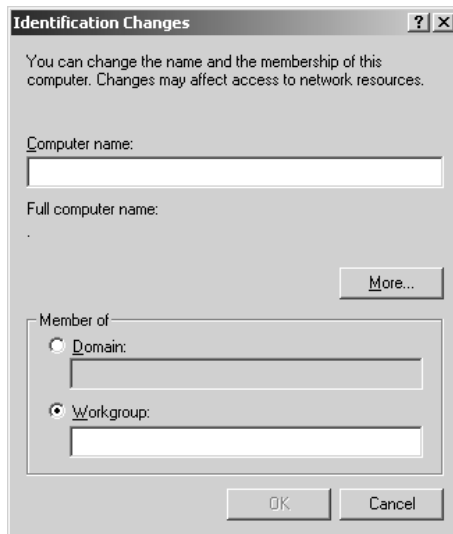
The Control Panel window appears.

- 2 Double-click the System icon.

The System Properties dialog box appears.

- 3 Click the Network Identification tab, then click Properties.

The Identification Changes dialog box appears.



Notes

- Assign a unique name of up to 15 alphanumeric characters to every computer connected to the same LAN.
- The workgroup indicates the name of a group sharing files. Assign the same workgroup name for all computers that share files.

Note

Restarting the computer takes longer than booting.

4 Specify Computer name and Workgroup for your computer.

5 Click OK.

The message "Restart your computer to enable changes." is displayed.

6 Click OK.

The System Properties dialog box reappears.

7 Click OK then Yes to restart the computer.

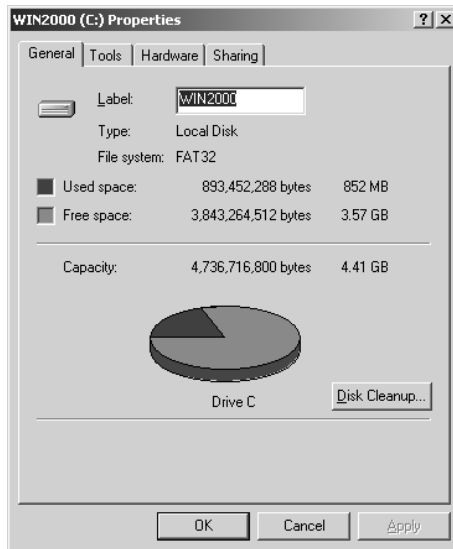
Proceed to the next section, To set up sharing on the computer on page 36, upon completion of this setting.

To set up sharing on the computer

You can let other users share drives and folders from your computer on the wireless LAN.

The following information explains how to share Drive C (C:), as an example. You can also set up your computer to share other drives and folders.

- 1 Double-click My Computer the desktop.
- 2 Right-click the C: icon, then click Sharing.
The Properties dialog box appears.



- 3 Click the Sharing tab and click Share this folder.
- 4 Click OK.

C: is made available for sharing on the wireless LAN.

If you have accessed to the Internet via the telephone line, proceed to the next section, To change Internet Connection settings on page 37 upon completion of this setting.

If you have accessed to the Internet via a cable modem (xDSL modem) or ISDN router, proceed to Installing software on page 40.

Tip

For further information on sharing on the computer, refer to the Windows manual or Help files.

Note

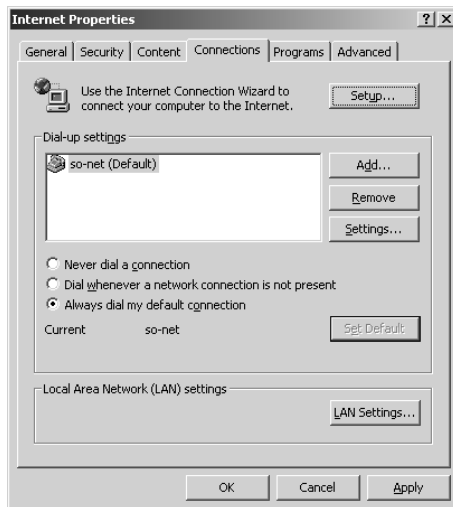
Consider all issues before making any folder available for sharing on the wireless LAN.

To change Internet connection settings

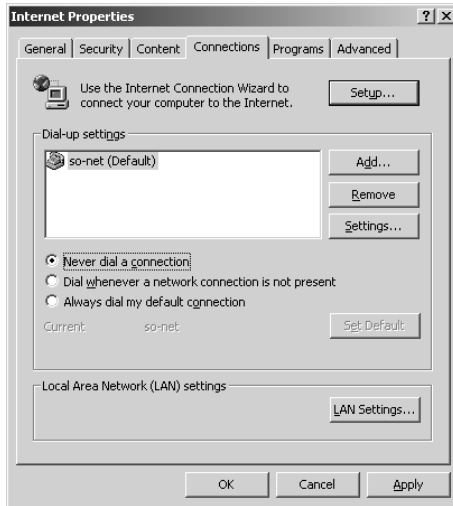
If your Internet access has been via a telephone line, you must change the Internet connection settings.

Microsoft Internet Explorer

- 1 Select Settings - Control Panel from the Start menu.
- 2 Double-click Internet Options.
- 3 Click the Connections tab.

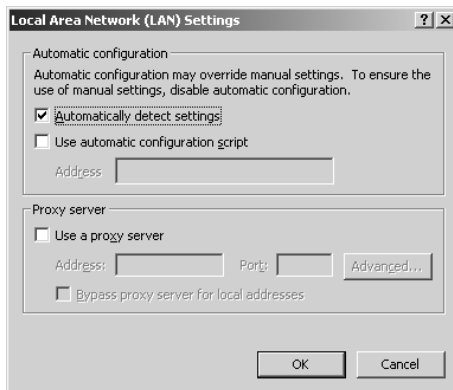


4 Check Never dial a connection.



5 Click LAN Settings.

The Local Area Network (LAN) Settings dialog box appears.



6 Check Automatically detect settings under Automatic configuration.

7 Click OK.

The Local Area Network (LAN) Settings dialog box closes.

8 Click OK.

The Internet Properties dialog box closes.

9 Click .

The Control Panel window closes.

Upon completion of the above setup, proceed to Installing software on page 40.

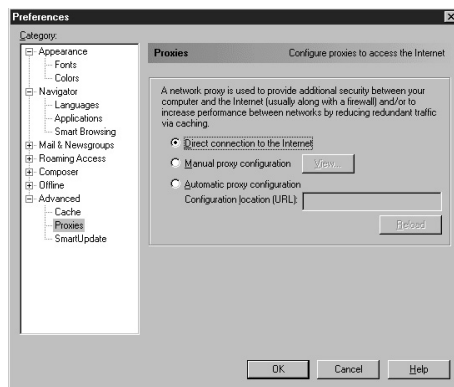
Netscape Communicator

1 Launch Netscape Communicator.

2 Click Preferences from the Edit menu.

3 Click Advanced.

4 Click Proxies, then check “Direct connection to the Internet.”



5 Click OK.

The Preferences dialog box closes.

6 Click Reload in the browser window.

Upon completion of the above setup, proceed to Installing software on page 40.

Installing software

Before Installing the software:

- Install and connect the Access Point.
- Install the driver software. (page 13)
- Insert the Wireless LAN PC Card. (page 12)
- Quit all Windows programs.



If you want to install the software into another folder, click Browse and select the folder or directly enter the folder name.

Once you set up your Windows environment, install the Wireless Palette, the Basic Setup Utility, and the Custom Setup Utility software.

1 From the Start menu, click Run.

The Run dialog box appears.

2 Enter the name of the installer.

- If the computer has an internal CD-ROM drive, enter "Q:\SETUP.EXE." ("Q" indicates the name of the internal CD-ROM. Your CD-ROM drive may be identified with a different letter.)
- If you have copied the Wireless LAN folder from the supplied CD-ROM to your computer's hard disk, say in the C:\Temp folder, when installing the driver software on page 13, enter "C:\Temp\WirelessLAN\SETUP.EXE."

3 Click OK.

The Wireless LAN Utility Setup dialog box appears.

4 Click Next.

The License Agreement dialog box appears.

5 Read the agreement and click Yes to accept.

The Choose Destination Location dialog box appears.

6 Select the folder where you want to install the software and click Next.

The Setup Type dialog box appears.



Tip
If you want select specific software applications, select Custom and click Next.

7 Select Standard and click Next.

Software installation begins and the Setup Complete dialog box appears a while.

8 Click Finish.

The Confirmation Items dialog box appears.

9 Confirm the information and click OK.

Installation is complete and your computer restarts.

Proceed to the next section, Setting up the connection environment on page 44, for instructions how to establish connection between the computer and the Access Point.

Registering your Wireless LAN Access Point/ Wireless LAN PC Card

When you restart your computer after installing the software, a registration icon will appear on the desktop. Connect to the Internet using your Internet Service Provider. Double-click the registration icon to register the products. For details on customer registration, refer to the supplied Customer Registration for the Wireless LAN Access Point/Wireless LAN PC Card.

Caution

To protect your personal data, Sony uses SSL (an encryption protocol) for communication between your browser and the Sony WWW server. If you are accessing the Internet from inside of an enterprise LAN, you may not be able to use SSL due to the proxy server of the LAN. Contact your network administrator in this situation.

To modify the installed software

You can uninstall a specific software application or add one later on.

1 Display the Wireless LAN Utility Setup dialog box.

See steps 1 though 3 on page 40 for details.

2 Select Modify and click Next.

The Select Components dialog box appears.



To uninstall a specific software application, uncheck the application you want to uninstall.



To uninstall a specific software application, select Modify and click Next. See To modify installed software on page 41 for more information.

- 3 Check the software applications you want to install, then click Next.

The software installation begins and the Maintenance Complete dialog box appears after installation is completed.

- 4 Click Finish.

To start the software

Select VAIO - Wireless LAN from the Start menu, and then select software you want to launch.

To uninstall software

Windows 98 Second Edition

- 1 From the Start menu, click Settings, then click Control Panel.

The Control Panel window appears.

- 2 Double-click the Add/Remove Programs icon.

The Add/Remove Programs Properties dialog box appears.

- 3 Select Wireless LAN Utility from the list of automatically removable software and click Add/Remove.

The Wireless LAN Utility Setup dialog box appears.

- 4 Select Remove and click Next.

The Confirm File Deletion dialog box appears.

- 5 Click OK.

Software uninstallation begins and the Maintenance Complete dialog box appears after installation is completed.

- 6 Click Finish.

 **Tip**

To uninstall a specific software application, select Modify and click Next. See To modify installed software on page 41 for more information.

Windows 2000

- 1** From the Start menu, click Settings, then click Control Panel.
The Control Panel window appears.
- 2** Double-click the Add/Remove Programs icon.
The Add/Remove Programs dialog box appears.
- 3** Select Wireless LAN Utility from the list of currently installed programs and click Add/Remove.
The Wireless LAN Utility Setup dialog box appears.
- 4** Select Remove, then click Next.
The Confirm File Deletion dialog box appears.
- 5** Click OK.
Software uninstallation begins and the Maintenance Complete dialog box appears after installation is completed.
- 6** Click Finish.

Setting up the connection environment

The following describes how to set up software for building a wireless LAN environment with the Access Point. Follow the steps below.

- 1 Use the Wireless Palette software to register the Access Point to every computer you want to connect in a wireless LAN.
- 2 Use the Basic Setup Utility to set up the Access Point on one of the wireless LAN computers.

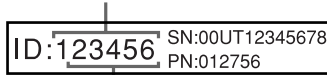
To establish communication with the Access Point

On every computer you want to connect to the wireless LAN, use the Wireless Palette to establish communication with the Access Point.

Before attempting to establish a wireless LAN environment:

- Check the six-digit Access Point ID on the bottom surface of the Access Point.

Access Point ID



Factory-set Encryption KEY

- Install and connect the Access Point. (Refer to the Access Point Operation Instructions manual.)
- Insert the Wireless LAN PC Card to the computer.

- 1 Double-click the  on the task tray.

The Wireless Palette status window appears.



Tip


If the icon is not on the tray, select VAIO - Wireless LAN - Wireless Palette from the Start menu.

Tip

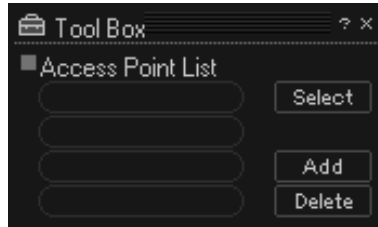
Check Peer to Peer to establish wireless communications between computers without using the Access Point. For more information, see the section, To establish a wireless LAN environment without using the Access Point on page 46.

Tips

- If the Access Point is already installed, your network administrator may have changed the Encryption Key using the Basic Setup Utility or the Custom Setup Utility. Contact your network administrator for instructions.
- If the Encryption Key is specified, wireless communications are encrypted for protection against unauthorized reception.

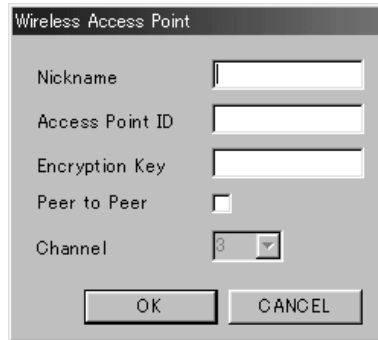
- 2 Click the Tool Box button .

The Tool Box window appears.



- 3 Click Add.

The Add New Access Point dialog box appears.



- 4 Specify the Nickname, Access Point ID, and Encryption Key.

The Nickname identifies the Access Point. Enter up to eight alphanumeric characters for Nickname. If multiple Access Points exist, make sure to assign a unique name to each one.

For Access Point ID and Encryption Key, enter the six digit Access Point ID from the bottom of the Access Point. The factory-set Encryption Key are the last five digit of the Access Point ID.

5 Click OK.

The Tool Box window reappears.

6 Select the Nickname of the Access Point to which you want to connect.

7 Click Select.



8 Click OK.

The Nickname of the selected Access Point is displayed on the Wireless Palette.



If an error message is displayed, the information you entered contains an error. Go back and repeat step 3 through step 8.

To establish a wireless LAN environment without using the Access Point (Peer to Peer mode)

To establish a wireless LAN environment without using the Access Point, follow the steps in this section on only one of the computers on the wireless LAN. On the other computers, perform the procedure described in the section, To establish communications with the Access Point on page 44.

Tip

A wireless LAN environment between multiple computers may also be established in the Peer to Peer mode.

Notes

- Check Peer to Peer on only one computer to establish the wireless LAN.
- If other Access Points are present in close proximity and problems occur, try another channel.

Note



Enter the same Access Point ID and Encryption Key on all computers on the same wireless LAN.

Notes

- It takes some time for the Peer to Peer mode to effect. Clicking OK causes Windows to search the DHCP server in the wireless LAN environment to obtain an IP address. It will take longer without a DHCP server. If no DHCP server is found, an unused IP address is assigned (Windows Auto IP feature).
- In the Peer to Peer mode, the Wireless Palette status window does not display any computer name.

- 1** Follow steps 1 through 3 in the section, To establish communications with the Access Point on page 44.
- 2** Check Peer to Peer and specify Channel.
For Channel, select a channel you want to use for wireless communications.
- 3** Enter the Access Point ID and the Encryption Key.
Enter up to 32 alphanumeric characters for Access Point ID.
Enter five alphanumeric characters for Encryption Key.
- 4** Click OK.
The Tool Box window appears.
- 5** Click the Nickname for the Peer to Peer configuration you registered previously.
- 6** Click Select.
The configuration data of the selected Nickname is displayed.
- 7** Click OK.
The Peer to Peer mode takes effect.

Tips

The icon may appear as  or .

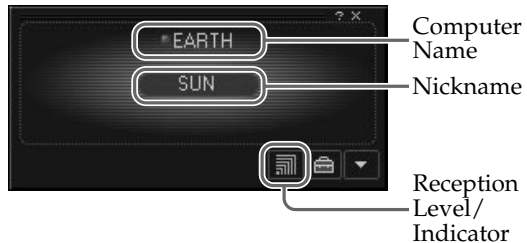
If so, no communications are taking place with the Access Point. Check the Access Point's configuration. For further information, refer to the Wireless Palette Help files.

Verifying communication with the Access Point

Follow the steps below to verify that if the Wireless LAN PC Card has a connection with the Access Point.

- 1 Double-click the  on the task tray.







The Wireless Palette status window appears.



- 2 Verify the Nickname.

The Nickname identifies the Access Point with which the computer has a connection. Verify that the Nickname you entered (page 45) is displayed.

- 3 Verify the reception level.

The reception level indicator (//) indicates the condition of the communications with the Access Point.  indicates the optimum communication. When  or  is displayed, no communications are taking place between the Access Point and the computer. Check the Access Point configuration. For more information, refer the Wireless Palette Help.

- 4 Verify the Computer Name.

The Computer Name is the computer name you have specified on page 24 (Windows 98 Second Edition) or page 34 (Windows 2000). The wireless LAN connection is established with the computers displayed.

Tip

To launch the Custom Setup Utility, click the Start button and select VAIO - Wireless LAN - Custom Access Point Setup Utility.

Note

If an error message appears, click OK then confirm the following and repeat step 2.

- The Access Point is powered.
- The correct Access Point ID is displayed.
- The Access Point and the computer are located within a range of approximately 50 m (165 feet).

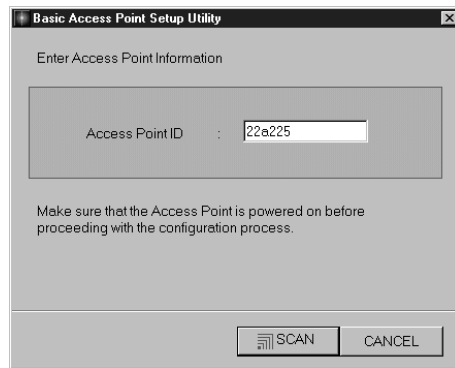
Setting up the Access Point

You can change the Access Point settings by using the Basic Setup Utility. Changes to the settings may be made by using the Custom Setup Utility as well.

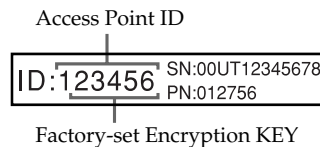
This operation must be performed on a single computer on the wireless LAN.

- 1 From the Start menu, click VAIO - Wireless LAN - Basic Access Point Setup Utility.

The Basic Setup Utility starts.



- 2 Confirm that the Access Point ID displayed is the one assigned to the Access Point you are configuring, then click SCAN. The Access Point ID is a six-digit number on the label attached on the bottom surface of the Access Point. If the Access Point ID displayed is different from the one on the label, enter the correct ID.



Note

Using the Wireless Palette, enter the same Encryption Key on every computer in the wireless LAN, as specified for the Access Point.

Tips

- If there are two or more Access Points in close proximity, assign a unique channel number to avoid radio interference.
- The factory-set Encryption Key of the access point is the last five digits of the Access Point ID.

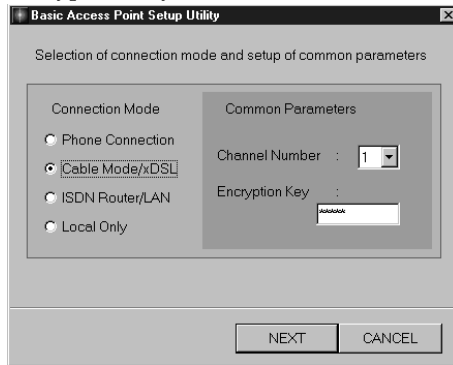
Note

If you have accidentally selected a wrong access method, click BACK and select the correct one.

3 Enter the common parameters, Channel Number and Encryption Key.

Select the channel that the Access Point uses for wireless communications for Channel Number. You can use Channel 1, 4, 7, or 10.

Enter any five-digit alphanumeric characters for Encryption Key.



4 Select the access method to the Internet from Connection Mode and click NEXT.

Select a destination to connect the Access Point. Available options are Phone Connection, Cable Modem/xDSL, ISDN Router/LAN, and Local Only. The dialog that appears next depends on your selection.

Note

If you are using the Access Point and are connecting within an existing LAN that already has a DHCP server, do not use the Phone Connection or Local Only connection modes. Select Cable Modem/xDSL or ISDN Router/LAN connection modes.

When the Wireless LAN Access Point is using Phone Connection and/or Local Only connection modes, the Access Point acts as a DHCP server.

An Access Point that is connected to a LAN that has another DHCP server may experience the following problem while using the Phone Connection or Local Only connection mode. A client computer within the LAN may acquire an invalid IP address from the Access Point, not from the regular DHCP server. If this happens, the client computer may not be able to access the network because the IP address supplied by the Access Point is a private IP address (10.0.1.2 - 17, by default). Contact your network administrator before connecting a Wireless LAN Access Point to an existing LAN.

Note

If you must press “0” on your telephone to hear the tone signal and place an outgoing call, you can not use your telephone line for Internet access using the Access Point.

If you hear the tone signal when you pick up the receiver even though you must press “0” to place an outgoing call, you can use your telephone line for Internet access using the Access Point. In these situations, enter “0” before the telephone number for Phone Number 1 and Phone Number 2.

💡 Tips

- Phone Number 2 is the alternate telephone number to use when a call to Phone Number 1 is not completed.
- Your Internet Service Provider may specify the DNS server(s). In this case, enter data for DNS Server 1 (DNS Server 2).

Note

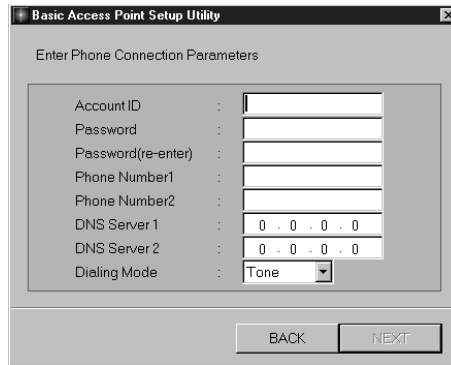
The indicators on the Access Point flashes while changes to the settings are processed.

The link test is disabled until the Access Point POWER indicator turns green.

(It takes approximately 30 seconds before the POWER indicator turns green.)

Phone Connection:

The Enter Phone Connection Parameters dialog box appears.



The screenshot shows a window titled "Basic Access Point Setup Utility" with a close button in the top right corner. The main title is "Enter Phone Connection Parameters". Below this, there is a list of fields for configuration:

- Account ID : [text input]
- Password : [text input]
- Password(re-enter) : [text input]
- Phone Number1 : [text input]
- Phone Number2 : [text input]
- DNS Server 1 : [text input with dots, showing 0 . 0 . 0 . 0]
- DNS Server 2 : [text input with dots, showing 0 . 0 . 0 . 0]
- Dialing Mode : [dropdown menu showing Tone]

At the bottom of the dialog, there are two buttons: "BACK" and "NEXT".

- 1 Enter data for Account ID, Password, Password (re-enter), Phone Number 1, Phone Number 2, and Dialing Mode and click NEXT.

The confirmation dialog appears.

- 2 Make sure you have made correct settings, then click NEXT.

Changes to the Access Point settings are reflected and the Finish screen appears.

- 3 Click LINK TEST.

The link test between the Access Point and the computer is performed.

When the confirmation dialog box appears, click FINISH to exit.

Note

If you select Cable Modem/xDSL or ISDN Router/LAN, set up the device for an Internet connection.

Note

The indicators on the Access Point flashes while changes to the settings are processed.

The link test is disabled until the POWER indicator of the Access Point turns green.

It takes approximately 30 seconds before the POWER indicator turns green.

Note

If you select ISDN Router/LAN, make sure to restart the computer upon completion of the link test.

Cable Modem/xDSL, ISDN Router/LAN, and Local Only:

The confirmation dialog appears.

- 1** Make sure you have made correct settings and click NEXT.

Changes to the Access Point settings are reflected and the Finish screen appears.

- 2** Click LINK TEST.

The link test between the Access Point and the computer is performed.

When the confirmation dialog box appears, click FINISH to exit.

This completes the software setup. The wireless LAN environment is complete.

Now, you can copy a file from another computer on the wireless LAN (page 53) or connect to the Internet (page 54).

Copying a file from another computer

Note

To copy a file from another computer, you must enable file sharing on the computer (page 25, page 36) containing the file.

Note



With the standard configuration, you can copy files into the computer from which you are working.

Once you have verified the network connection using the Wireless Palette, you can copy a file from another computer on the LAN.

- 1** Double-click the Network Neighborhood icon (Windows 98 Second Edition) or the My Network Places icon (Windows 2000) on the desktop.
- 2** Double-click the desired computer.
The drives enabled for file sharing are displayed.
- 3** Double-click the desired drive.
Files in the drive are displayed and available for copying.

Connecting to the Internet

Tip


The icon may appear as  or .

Notes

- The Access Point is configured with the manual connection mode at the time of shipment. Clicking Connect initiates the dial-up connection.
- Note that automatic disconnection may not work due to unexpected packets sent from the Internet. Click Disconnect to disconnect the connection when you are through with the Internet access.

When you are through with all settings described in Setting up the connection environment on page 44, let's connect to the Internet.

Phone Connection:

- 1 Double-click the  on the task tray.
- 2 Click Connect.

Connection to the Internet service provider is established.



- 3 Launch your web browser.
A home page is displayed.

- 4 Click Disconnect.

The dial-up connection is disconnected.

Tips

- When the Access Point is in the automatic connection mode, starting an e-mail or browser application causes a dial-up attempt to be made. To place the Access Point in the automatic connection mode, use the Custom Setup Utility. For more information, see the Custom Access Point Setup Utility Help.
- The Access Point does not automatically disconnect a connection to the Internet when an e-mail or browser application is closed on a single computer in order to allow multiple computers to have simultaneous Internet access. Thus, to disconnect the dial-up connection, you must follow the above steps.
The Access Point automatically disconnects the dial-up connection if no communication is made within two minutes.
This disconnect period may be changed with the Custom Setup Utility. For further information, see the Custom Access Point Setup Utility Help.

Note

When the ISDN router is in use, the Connect/Disconnect function of the Wireless Palette is disabled.

Notes

- Check the cable modem's ability to make an Internet connection.
- When the cable modem's is in use, Connect/Disconnect is not displayed on the Wireless Palette.

ISDN Router:

- 1** Perform the connection attempt procedure on the ISDN router. (See the manual that came with your ISDN router for details.)

Connection to the Internet service provider is established.

- 2** Launch your web browser.
A home page is displayed.

Cable Modem:

- 1** Launch your web browser.
A home page is displayed.

The cable modem holds open the connection to the Internet. When the computer is connected to the Access Point, it is also connected to the Internet.

Precautions

Safety

Do not drop or cause a mechanical shock to the Wireless LAN PC Card, as this may damage the unit.

Installation

Do not place the Wireless LAN PC Card where it will be exposed to the following conditions:

- Unstable surface.
- High humidity or poor ventilation.
- Excessive dust.
- Direct sunlight or extreme heat.
- Closed cars.
- Magnetized location (near a magnets, speaker, or TV).

Operation

If the Wireless LAN PC Card is moved directly from a cold location to a warm one, or if it is placed in a very damp environment, moisture may condense on the parts inside. The Wireless LAN PC Card may not operate properly should moisture occur.

Cleaning

Clean the casing with a soft cloth, lightly moistened with water or a mild detergent solution. Do not use any type of abrasive pad, scouring powder or solvent such as alcohol or benzene as it may damage the finish of the casing.

Specifications

Protocol support

TCP/IP, NetBEUI compliant

Standard

IEEE802.11b/IEEE802.11

Radio frequency

2.4 GHz

Modulation method

DS-SS (IEEE802.11 compliant)

General

Power requirements

5 V AC (supplied from the computer through the PC card adapter)

Current

Peak current at transmission; 280 mA,
peak current at reception: 180 mA

Connector

PC card slot Type-II

Dimensions (approx.)

Approx. 118 × 5 × 54 mm (approx. 4³/₄ × 7⁷/₃₂ × 2¹/₄ inches) (w/h/d)
(Antenna height: 8.7mm (1¹/₃₂ inches))

Mass

Approx. 55 g (approx. 2 oz)

Operating temperature

5°C to 35°C (41°F to 95°F) (not condensed)

Environment temperature

-20°C to 60°C (-4°F to 140°F) (not condensed)

Supplied accessories

See Unpacking on page 10.

Getting Help

This section describes how to get help and support from Sony, as well as troubleshooting tips for your Wireless LAN PC Card.

About Sony's Support Options

Sony provides several support options for your Wireless LAN PC Card. When you have questions about your Wireless LAN PC Card and its related software, check these options for answers:

- **This guide** explains how to use your Wireless LAN PC Card.
- **The Sony Wireless LAN PC Card support Web site** (<http://www.sony.com/wirelesslansupport/>) provides the latest information on your Wireless LAN PC Card. On this Web site, you will find:
 - Answers to Frequently Asked Questions (FAQs)
 - An electronic version of the Operating Instructions
 - Help files
 - Installation information
 - Software updates
- **The Sony e-mail support service** answers your questions by electronic mail. Just send your question in an e-mail message and a customer service representative will reply. To send a question to Sony e-mail support, fill out the e-mail form at <http://www.sony.com/wirelesslansupport/>
- **The Sony fax-back service** provides you with answers to commonly asked questions. You can use this automated service to request a list of available topics and then select the topics you want to receive. To contact the Sony fax-back service, call 1-877-760-7669.
- **The Sony Customer Information Services Center** offers information about your Access Point, Wireless LAN PC Card, and other Sony products that work with your computer. To contact the Sony Customer Information Services Center, call 1-877-760-7669.

Glossary

Channel number

The frequency used for wireless communications.

Wireless communications are available only among client computers and Access Points that use the same channel.

Client

A single computer on a wireless LAN. It may be called a client computer as well.

DHCP (Dynamic Host Configuration Protocol)

DHCP lets network administrators centrally manage and automate assignment of IP addresses with a network environment.

DNS (Domain Name System)

A system that translates host names into IP addresses.

Networks that use the TCP/IP protocol, such as the Internet, use a set of numbers like 192.168.0.1 (IP address) to identify a computer.

However, since the IP address is rather hard to remember, DNS was developed to allow a name like “www.sony.com” to identify a computer for convenience.

DNS servers manage these translations from host names into IP addresses.

Encryption Key

IEEE802.11-compliant security system.

Using the Encryption Key as the password, only client computers and Access Points that have the same ID and password may log onto the same wireless LAN for file sharing.

LAN (Local Area Network)

A network which is accessible only to its members, unlike the Internet which is open to an unlimited number of people.

A LAN may be built for different purposes. For example, you can build an office LAN that is accessible only to members of the same department or a home LAN that is accessible only to family members.

NetBEUI (NetBIOS Extended User Interface)

NetBEUI is part of the transport layer, not the NetBIOS programming interface. NetBEUI cannot be routed, so it is most appropriate in single subnet (continuous) network.

Protocol

The formal specifications that define the procedures for computers to follow when transmitting and receiving data.

TCP/IP (Transmission Control Protocol/Internet Protocol)

TCP is a connection-oriented protocol for establishing reliable, sequenced data transfer. TCP ensures that data reaches its destination.

IP assembles and addresses data packets for transmission to their network destinations.

WAN (Wide Area Network)

A network that interconnects remote LANs through the Internet or telephone lines.

Troubleshooting

This section describes how to solve common problems you may encounter when using your Wireless LAN PC Card or Wireless LAN Access Point. Many problems have simple solutions, so try these suggestions before you call Sony Customer Information Services Center.

❑ On the overall wireless communications

My computer does not detect the Wireless LAN PC Card.

→The Wireless LAN PC Card may not be properly inserted into the PC card slot of your computer. Check that the Wireless LAN PC Card is inserted in the proper direction, then push it in as far as it will go.

Other computers on the wireless LAN are not displayed.

→You did not enter the password when Windows started. Enter the user name and the password requested on Windows startup, then log onto the LAN.

→The windows environment is not properly set up. Follow the instructions in Setting up Windows environment on page 18 or 29 to set it up properly.

→No other computers are logged onto the wireless LAN.


I cannot access the Internet.

→The Access Point is not connected. Follow the instructions in the Access Point Operating Instructions to connect it properly.

→The Wireless LAN PC Card is not properly inserted into your computer. See the instructions on page 12 of this manual to insert it properly.

→Communication between the Access Point and your computer are not established. Check the communication status using the Wireless Palette.

→The Access Point is not properly configured. Configure the Access Point with the connection mode of your choice using one of the Access Point setup utilities.

→The Access Point and your computer are too far apart (more than approximately 50 m (165 feet)). When the Wireless Palette shows the  icon, move your computer closer to the Access Point.

The data transfer speed is slow.

→There is radio interference with another Access Point. Try assigning another channel number using one of the Access Point setup utilities.

→There are too many clients logging on to the Access Point. Try later.

I cannot remember the Encryption Key.

→Use the Sony-supplied Access Point Firmware Update Utility to resume the factory configuration of the Access Point. Use the Wireless Palette to register the Access Point and establish communications with it. Use one of the Access Point setup utilities to configure the Access Point. For further information about how to use the Access Point Firmware Upgrade Utility, select VAIO - Wireless LAN - Access Point Firmware Upgrade - Manual to see the on-line manual.

The Wireless Palette still shows the previous computer name after a change.

→The Access Point has not yet recognized the new computer name. Click the Nickname of the Access Point in the Tool Box window of the Wireless Palette, then click Select. If the correct information is displayed, click OK.

The communication band is supposed to be 11 Mbps, but MPEG2 data transfer fails.

→11 Mbps is a logical value. The actual value is approximately 4 to 5 Mbps. This occurs with almost all IEEE 802.11 compliant products. The high-speed stream transfer of MPEG2, may cause a short of the communication band.

No communication is available even though my computer is located within 50 m (165 feet) of the Access Point.

→The actual communication distance depends on the installation site and ambient conditions. Move your computer closer to the Access Point.

On the dial-up connection

When using the dial-up connection, the Internet connection is unintentionally disconnected.

→The automatic disconnection feature is enabled. If no communication takes place for two minutes, the Access Point automatically disconnects the dial-up connection by default. To change this setting, use the Custom Access Point Setup Utility. For further information, see the Custom Access Point Setup Utility Help.

When the automatic connection feature is enabled, a connection to the Internet is unintentionally established.

→Some e-mail applications periodically check incoming mail. Windows also periodically establishes a connection to the Internet for update notices.

The dial-up connection is disabled for a while after disconnection by clicking Disconnect.

→The Access Point does not accept a connection command issued by clicking Connect for one minute after manual disconnection. Wait approximately one minute after disconnection, then try again.

Limited Warranty Statement

Sony Wireless LAN PC Card Warranty

The limited warranty on your hardware covers parts and labor against defects in material or workmanship for a period of three months from the original date of purchase. You can extend the warranty period for an additional nine months by registering your Wireless LAN PC Card. See "Registering Your Wireless LAN Access Point/Wireless LAN PC Card" on page 41. Once you register your Wireless LAN PC Card, the limited warranty period is twelve months from the original date of purchase.

For the purpose of this Limited Warranty "SONY" means SONY ELECTRONICS INC. for Products purchased in the United States of America. SONY warrants this Wireless LAN PC Card product ("the Product") against defects in material or workmanship as follows:

1. Labor: For a period of ninety (90) calendar days from the original date of purchase from SONY or a SONY authorized reseller, SONY will repair defects in material or workmanship in the Product at no charge, or pay the associated labor charges to a SONY authorized service facility. The ninety (90) day warranty period is extendible only to the original purchaser, for an additional period of nine (9) months, for a total of twelve (12) months from date of purchase when the Product is registered electronically prior to the expiry of ninety (90) days from the original date of purchase. After the applicable period, you must pay for all labor charges.
2. Parts: For a period of ninety (90) calendar days from the original date of purchase from SONY or a SONY authorized reseller, SONY will supply, at no charge, new or rebuilt, at SONY's option, replacement parts in exchange for defective parts. Any replacement parts will be warranted for the remainder of the original warranty period or ninety (90) calendar days from installation by SONY's authorized service facility, whichever is longer. The ninety (90) day warranty period is extendible only to the original purchaser, for an additional period of nine (9) months, for a total of twelve (12) months from date of purchase when the Product is registered within ninety (90) days from the original date of purchase. All defective parts replaced under this Limited Warranty will become the property of SONY.

This Limited Warranty covers only the hardware components packaged with the Product. It does not cover the technical assistance for hardware or software usage, and it does not cover any software products whether or not contained in the Product; SONY excludes all warranties express or implied in respect of any software provided with the product and any such software is provided "AS IS," unless expressly provided for in any enclosed software limited warranty. Please refer to the End User License Agreements included with the Product for your rights and obligations with respect to the software.

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With respect to certain components you may be entitled to express warranty service during the warranty period, subject to certain restrictions. Please contact SONY for further information.

SONY will not be responsible for any damage to or loss of any programs, data or other information stored on any media or any part of any Product serviced hereunder or any consequential damages resulting therefrom.

Be sure to remove all third party hardware, software, features, parts, options, alterations, and attachments not warranted by SONY prior to sending the Product to SONY for service. SONY is not liable for any loss or damage to these items.

This Limited Warranty does not cover any consumable items supplied with this Product; cosmetic damages; damage or loss to any software programs, data, or media; or damage due to (1) acts of God, accident, misuse, abuse, negligence, commercial use or modifications of this Product; (2) improper operation or maintenance of this Product; (3) connection to improper voltage supply; or (4) attempted repair by any party other than a SONY authorized service facility. This Limited Warranty does not apply when the malfunction results from the use of this Product in conjunction with accessories, products or ancillary or peripheral equipment, or where it is determined by SONY that there is no fault with the Product itself. This Limited Warranty is valid only in the United States of America. This Limited Warranty is invalid if the factory-applied serial number has been altered or removed from the product.

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Technical Support: Although technical support is not provided free of charge under this Limited Warranty, SONY has established a telephone number for technical support. Charges may apply for technical support, unless and to the extent that free technical support for a limited period is provided in writing as a feature of your Product. Prior to placing you call, please have available the model and serial numbers for your Product, date of purchase, a list of all options installed in your Product and a detailed description of the problem.

For Product support, online knowledge base, frequently asked questions, and free updates via the Internet:
<http://www.sony.com/wirelesslansupport/>

For Product information, service assistance, resolution of a service problem, or technical assistance, call 1-877-760-7669.

Save this for future reference.

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Sony  line <http://www.world.sony.com/>

Printed on recycled paper

Printed in Japan