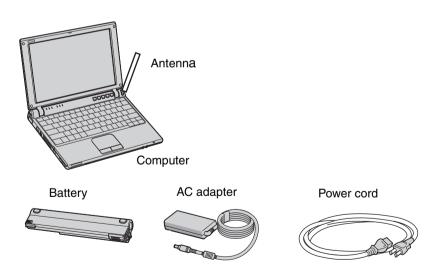
About your Computer

Thank you for purchasing a VAIO® computer! Your new computer combines state-of-the-art hardware and software to bring you unparalleled wireless connectivity.

Contents

Your computer may not be equipped with all of these hardware features or accessories. The location of the controls, ports, and jacks may vary from the illustrations shown in this section. See your computer's specification sheet for details on your computer's supplied accessories.

Carton Contents



About Wireless Connectivity and Technlogy

Your computer is equipped with the new Evolution Data Optimized (EV-DO) technology, by Sprint®. With built-in EV-DO Wireless WAN capabilities, your computer can connect wirelessly to your e-mail, the Internet, and any intranet networks with which you may be associated with, in a secured mobile environment. You can now enjoy increased mobile broadband high-speeds and enhanced graphics like never before!

To Activate Your Sprint Account

You can activate your Sprint account account using one of the following methods:

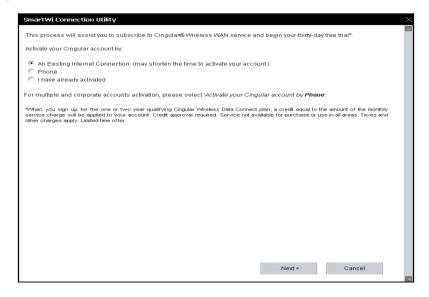
- ☐ With an over the air activation with Sprint network (preferred method)
- ☐ By phone without an internet connection

With Over the Air Activation With Sprint Network

To activate your Sprint account with over the air activation with Sprint network follow these steps:

- 1 Click Start in the Windows® taskbar, click All Programs, then click SmartWi Connection Utility.
- 2 From the SmartWi Connection Utility menu, click Activate with Sprint.
- 3 Follow the **Sprint Activation** on-screen instructions.

Sprint Activation Screen

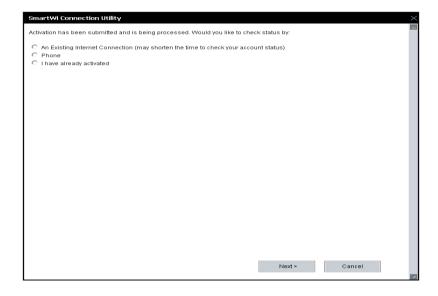


By Phone (without an internet connection)

To activate your Sprint account without using an existing internet connection, follow these steps:

- 1 Call Sony Customer support at 1-888-604-VAIO (8246).
 - You will receive Activation Code, MSID, and MDN by email within 48 hours. After you receive the email, start the "enter activation code" procedure beginning with step 2 below.
- 2 Click Start in the Windows® taksbar, click All Programs, then click SmartWi Connection Utility.
- 3 From the SmartWi Connection Utility menu, click Enter Activation Code.
- 4 Follow the **Sprint Activation** on-screen instructions.

Activation Status Screen



About SmartWi Connection Utility

The SmartWi Connection Utility functions largely as a switch manager between the various forms of wireless connectivity: Bluetooth®, WLAN, and WWAN using Sprint® Wireless software.

You can click one of the three wireless options at a time. The SmartWi Connection Utility allows you to switch between the three options.

SmartWi Connection Utility main screen



Starting SmartWi Connection Utility

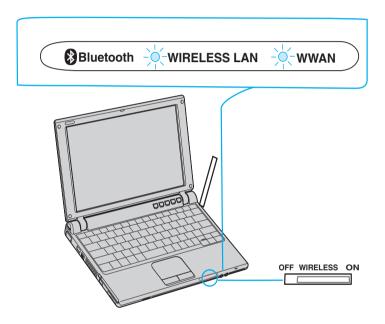
At initial startup, a pop-up prompt appears from the Task Tray. Clicking the popup prompt or double-clicking the tool icon starts the SmartWi Connection Utility, then you are prompted to activate your Sprint account.

If you close the program, however, and later wish to restart it, do the following:

VAIO® Computer Wireless Information

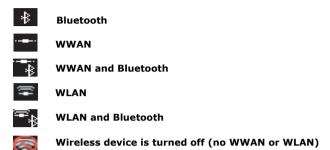
- 1 Make sure your computer is turned on.
- 2 Make sure the wireless switch is turned on. If it is not, locate the switch on the front left portion of your computer and slide the switch up to the **ON** position.

Wireless switch and indicators



- Once you slide the wireless switch to the on position, the SmartWi Connection Utility window appears automatically.
- 3 You may also click the **SmartWi Connection Utility** icon in the taskbar notification area. Depending on the wireless selection, one of six icons may appear in the taskbar notification area.

SmartWi Connection Utility icons



- Note that WWAN and WLAN cannot coexist simultaneously. When one is selected, the other is automatically deselected.
- 4 Alternately, press Start, select All Programs, select the VAIO SmartWi Connection Utility folder, and click SmartWi Connection Utility. The SmartWi Connection Utility dialog box displays.

About the Wireless Switching Window

The Wireless Switching Window is a utility that allows you to switch between wireless modes. You can easitly switch between Bluetooth®, WLAN, and WWAN by pressing keyboard buttons instead of using the touch pad (or a separately available USB mouse).

Using the Wireless Switching Window

To start the Wireless Switching Window utility, press $\mathbf{Fn} + \mathbf{F}$ to bring up the window. Then to toggle between wireless modes hold the \mathbf{Fn} key down while pressing the \mathbf{F} key.

Wireless Switching Window



Using the Wireless Connection Utility

To use the wireless connectivity features and begin using e-mail or connecting to the Internet, simply click the desired button: Sprint® Wireless (for WAN connectivity), WLAN, or Bluetooth®.

Wireless Connection Utility main screen



Using the Sprint Wireless WAN connection

To use Sprint Wireless WAN (WWAN) connectivity, do the following:

Click the Sprint button on the SmartWi Connection Utility main screen.
A Sprint WWAN launch area display appears below the button.

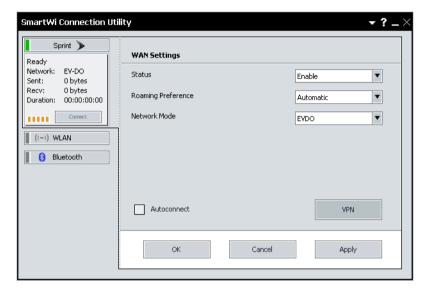
Sprint WWAN launch area



2 Click anywhere in the **Sprint WWAN** launch area.

The Sprint WAN Setup screen displays.

Sprint WAN Setup screen



3 By default, your connection to the Sprint service initiates.



For FCC Radio Frequency Exposure (RF) safety reasons, please keep the device at least 20cm distance from your body when the WWAN is operating.

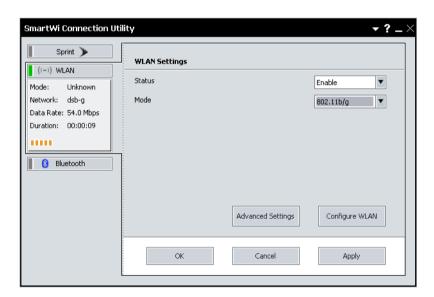
Using the Wireless LAN connection

To use Wireless LAN (WLAN) connectivity, do the following:

- 1 Click the WLAN button on the **SmartWi Connection Utility** main screen. A status display appears below the button.
- 2 Click the status display below the WLAN button. The screen enlarges to display WLAN Settings.

The first time you connect with the WLAN, the Wireless Help Utility will launch automatically and guide you through the initial setup.

WLAN Settings dialog box



To deactivate WLAN connectivity, select **Disable** for the Status field drop-down box on the WLAN Settings dialog box.

By default, WLAN uses the IEEE802.11a/b/g standard technology for WLAN connectivity. The standard includes the Wired Equivalent Privacy (WEP) encryption method, which is a security protocol and WiFi Protected Access.

To use IEEE802.11b or IEEE802.11g WLAN connectivity standard only, select them from the Mode field drop-down box.

- Wireless LAN devices using the IEEE802.11a standard and the ones using the IEEE802.11b or g standard cannot communicate because the frequencies are different. Wireless LAN devices using the IEEE802.11g standard can only communicate with a device using the IEEE802.11b/g standard, not with the IEEE802.11a standard.
- ✓ IEEE802.11a: The standard speed is 54 Mbps, or about 5 times faster than a Wireless LAN device using the IEEE802.11b standard. The IEEE802.11a connection is only available on certain computer models.
- ✓ IEEE802.11b: The standard speed is 11 Mbps, or about 30 to 100 times faster than a standard dial up.
- ✓ IEEE802.11g: The standard speed is 54 Mbps, or about 5 times faster than a Wireless LAN device using the IEEE802.11b standard.

Configuring the WLAN connection

You can configure your computer to connect to a WLAN using one of the following ways:

- without an access point device (ad-hoc)
- □ with an access point device

An ad-hoc network is a local network created only by the wireless devices themselves, with no other central controller or access device. Each device communicates directly with other devices in the network. For example, you can set up an ad-hoc network easily at home to communicate between two computers.

A computer communicating with an access point device is configured as part of an infrastructure network. An infrastructure network extends an existing wired local network to wireless devices by providing an Access Point, for example the **Sony Access Point**. The Access Point bridges the wireless and wired LAN and acts as a central controller for the Wireless LAN. The Access Point coordinates transmission and reception from multiple wireless devices within a specific range.

- ☐ To configure your computer to communicate without an access point device (ad-hoc), follow these steps:
 - 1 On the WLAN Settings dialog box, click the **Configure WLAN** button. The Wireless Network Connection Properties window displays.
 - Select the Wireless Networks tab.
 - 3 Click the **Add...** button.

The **Association** tab opens in the **Wireless network properties** window.

4 Enter a Network name (SSID).

You can choose up to **32-digit** alphanumeric name. If you want to communicate between two or more computers, you need to configure all computers using the same network name.

- 5 Select **Open** from the **Network Authentication** drop-down box.
- 6 Select **WEP** from the **Data Encryption** drop-down box.
- 7 Deselect the The key is provided for me automatically option button. The Network key, Confirm network key, and Key index (advanced) fields become active.
- 8 Enter the **Network key**.

The network key should be betwenn 5 and 13 alphanumeric characters long. You can choose whatever you want. If you want to communicate between two or more computers, you need to configure all computers using the same network key.

- 9 Enter the **Network key** again, for confirmation.
- 10 Select the check box This is a computer-to-computer (ad hoc) network; wireless access points are not used.
- 11 Click OK.

Your **Network name** appears in the **Preferred networks** area in the **Wireless Networks** tab display.

12 Click Advanced.

The Advanced window displays.

- 13 Select the Computer-to-computer (ad hoc) networks only option button.
- 14 Click Close
- 15 Click OK.

Your computer is ready to communicate with other computers.

To disconnect from a computer-to-computer (ad-hoc) network, click Configure WLAN on the WLAN Settings dialog box, select the **Network Name** in the Preferred networks area, click **Remove**, and then click **OK**.

☐ To configure your computer to communicate with an access point device, follow these steps:

Use the VAIO Wireless Utility to guide you through the set up process and provide you with more detailed information about wireless connections.

- 1 Make sure an access point is set up. See the instructions that accompanied the access point for more information.
- 2 Click Start, point to All Programs, VAIO Wireless LAN Setup Utility, and click VAIO Wireless LAN Setup Utility.
- **3** Follow the on-screen instructions.

Configuring Proxy and IP Settings for WLAN connections

You can configure Proxy and IP Settings for use in connecting to your WLAN network. To do this:

- 1 From the WLAN Settings dialog box, click Advanced Settings. The Advanced Settings window displays.
- 2 Select a network profile from the list that you want to configure, and then click Edit.
 - ☐ To configure your Proxy, follow these steps:

VAIO® Computer Wireless Information

- On the Proxy tab, select whether to use the Internet Explorer proxy settings or not, or to use a proxy server of your choice for your WLAN connection.
 - If you want to use a specified proxy server, you must identify its address and port.
- 2 Click **Apply** and proceed to configure IP Settings or click **OK**.
- ☐ To configure your IP Settings:
 - On the IP Settings tab, select whether to obtain the IP address and DNS server address automatically or not. If you do not want to obtain IP address automatically, you must identify the IP address, subnet mask, and default gateway addresses, and identify preferred and alternate DNS servers.
 - You can also select to obtain the IP address automatically and choose to specify preferred and alternate DNS servers.
 - 2 Click **Apply** and proceed to configure a Proxy, or click **OK**.
- 3 Click Close to close the Advanced Settings window.

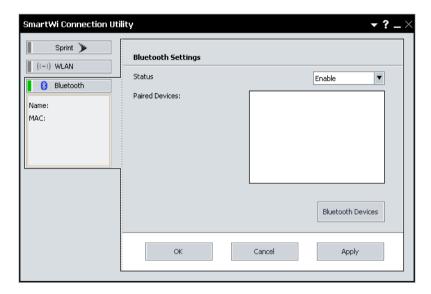
Using the Bluetooth technology connection

Bluetooth® technology enables you to establish wireless communication between your computer and other Bluetooth devices such as another computer or a mobile phone. You can transfer data between these devices without cables and up to 33 feet range in open space.

To use Bluetooth® technology connectivity, do the following:

- 1 Click the Bluetooth button on the Wireless Connection Utility dialog box. This activates Bluetooth® technology, and a status display appears below the button.
- 2 Click the status display below the Bluetooth button. The window enlarges to display Bluetooth Settings.





3 Click the **Bluetooth Devices** button.

The **Bluetooth Settings** dialog box displays listing the Bluetooth devices

already configured.

If there are no previous Bluetooth devices configured or if you are using the Bluetooth function for the first time, the **Add New Connection Wizard** displays. The **Add New Connection Wizard** allows you to set up and establish a new Bluetooth device connection. Follow the on-screen instructions

4 From the **Bluetooth Settings** dialog box, you can select the Bluetooth® device displayed in the list to view details about the device, reconfigure, or delete a device previously found.

Bluetooth Settings dialog box



5 Click **New Connection** to start the **Add Bluetooth Device Wizard** for searching and locating additional Bluetooth® devices in the vicinity of your computer. Follow the on-screen instructions.

When completed, click **OK**.

General Information

	artWi Connection Utility supports the following Wireless WAN-related actionality:
	Network Systems
	850 and 1900
	Network Services
	CDMA/EV-DO
	<i>Note:</i> Speech services are not supported
	Speed
	Maximum continuous speed and FTP download speeds to 160 kbytes or more.
	Interface Type
	Internal USB
	Connection Type
	PPP connection across USB
	Communication Port
	Virtual communications on COM port 4

Software Upgrades

You can upgrade your PC Card firmware/software from the Internet Web site http://esupport.sony.com/EN/VAIO.

FAQ and Troubleshooting

This section provides answers to frequently asked questions (FAQ) and possible operating workaround information for the SmartWi Connection Utility (SWCU). In addition, this information can help to clarify issues encountered when using the SmartWi, Cingular Connection Manager and its associated features.

Answers to Frequently Asked Questions

□ General

Question: What is the SmartWi Connection Utility?

Answer: SWCU is a wireless connection utility that is designed to switch and manage wireless connection modes between Bluetooth, 802.11, and Cingular GPRS/EDGE.

Question: Can I connect to two separate types of wireless connections simultaneously (for example, GPRS and 802.11b/g)?

Answer: No. Connections are mutually exclusive with the exception of Bluetooth, which will run concurrently with other wireless connections. Bluetooth can be switched on and off via the software without causing interference to the current connection (for example, GPRS or 802.11b/g).

□ SWCU Operation

Question: Why do I get a VAIO Assistant prompt when launching WLAN?

Answer: If there are not any WLAN profiles configured previously (this is the first time using WLAN), the VAIO Assistant will be launched automatically, or the VAIO Wireless Help Utility loads when it detects a failure in interfacing with the driver.

Question: I clicked the "Show All Prompts" button for the Reset all messages feature, but nothing seemed to happen. What happened when I clicked this button?

Answer: Clicking the Show All Prompts button for the Reset all messages feature activates all the prompts (not options) that request the "Don't ask me again" action. Normally, when notifications appear from yes/no prompts you can select if you do not want to be asked again for the notifications by checking the "Don't ask me again" check box. The "Reset all messages" feature provides a way to clear all the checkboxes from all the prompts simultaneously. As a result, the prompts will display again.

Question: I clicked on the SmartWi minimize option and noticed the minimized icon was not in the taskbar. Where is the minimized application

and how do I bring back the application to the desktop?

Answer: The SmartWi application was minimized into the Task-tray, which shows the "SWCU" icon and not into the "Taskbar". Depending on the type of connection and combination, if any, the SWCU icon will reflect the current connection. For example, if the SmartWi connects simultaneously with the Bluetooth device, the icon will reflect the connection type with a Bluetooth emblem. Switching on and off the Bluetooth option does not interfere with WiFi or WWAN connection.

To restore the SmartWi application to the desktop, click the SmartWi icon from the task-tray once (see the following illustration) or navigate to Start > All Programs > SmartWi Connection Utility, and then click SmartWi Connection Utility.

Minimized WWAN and Bluetooth connection icon



Question: How do I delete WLAN profiles?

Answer: Profiles can be managed and edited via SmartWi, but cannot be deleted. Profiles can be deleted from Windows Wireless Network Connection Properties or the Intel ProSet Wireless that displays when clicking Configure WLAN on the SmartWi WLAN Settings dialog box.

Question: I noticed that if I open a WLAN connection from SmartWi, sometimes the WLAN profile in Windows Wireless Network Connection window shows "Not connected", but actually the connection is established.

Answer: Under the Windows Wireless Network Connection window, click on the "Refresh network list" located under "Network Tasks". This should refresh Windows and provide an accurate overview of wireless status. If this does not fix the problem, then close the Windows Wireless Network Connection window and re-start it from Windows network connections.

☐ Sprint Launch Area

TBD

\square SMS

Question: What does "Load" do and why does it not prompt for options or input?

Answer: The SMS help file indicates this is useful in case of accidental deletion of messages. The "Load" feature would be a way to recover the deleted messages, however, this option provides no notification that the task completed successfully.

Question: What does "Save" do and why does it not prompt for options or input?

Answer: The help file indicates this keeps the current state of all folders, except the inbox. However, no notification is sent indicating the "Save" completed.

Question: I copied a message to the "Outbox". Why does it not prompt to enter the recipient?

Answer: Although you can move or copy a message from one folder to another, including the "Outbox", the message must have a recipient before the message can be sent.

Question: I created an SMS message, but am not connected to GRPS. How is it possible that the message can be sent?

Answer: Sending SMS does not need a GPRS data connection. As long as it detects and attaches to the Cingular network, it will able to send SMS.

Question: What is, and what does the function button "Update Address Book with Phone Book Contents" do?

Answer: When the SIM is installed, it contains a built-in phone book, which when using this feature, allows the contents of the phone book to be incorporated into the address book.

Question: Why I am not alerted of transferring the contents of phone book to the address book?

Answer: This is a feature that is still under development.

Question: When I select a message from a folder, and then scroll right, all previously existing messages appear to be gone when I scroll back to the original folder position.

Answer: Click out of the folder, and then back in to refresh the screen.

Question: I clicked on the Cingular Connection Manager minimize button and noticed that the CCM icon was not in the taskbar. Where is the minimize icon and how do I restore the application to the desktop?

Answer: The CCM minimizes into the Task-tray, which is represented by the "Cingular" trademark cross icon and not into the "Taskbar" (see the Cingular logo illustration below). Depending on the strength of the GPRS signal, the trademark will reflect this with a degree of graduations. In other words, if the signal strength synchronizes to 3 bars (see the Task-tray illustration below), the Cingular trademark cross will show approximately half of trademark jackman in the task tray. If the signal strength is one bar, the trademark jackman will appear to show a bottom portion of the trademark jackman. If the signal strength is at five bars, the entire Cingular trademark jackman will be fully indicated.

To restore the CCM to the desktop, click the Cingular trademark icon in the task-tray or right-click the Cingular trademark cross and select "Show".

Sprint logo trademark jackman



Minimized Sprint logo trademark jackman



□ GPRS Network

Question: Why do I see a network connection speed rate of 214.4 Kbs, but when I try to access a website that requires a minimum of 128 Kbs, I am told that I do not have the required minimum rate.

Answer: The network speed indicator provides the capacity of the wireless device which is 214.4 Kbs but the actual speed depends on network throughput. To work around this, try changing the network settings to optimize the GPRS/EDGE value. This is done by accessing CCM > Tools > Settings... > Advanced Networking, and then selecting "Optimized GPRS/EDGE value" option form the RWIN variables window.

Question: I am experiencing dropped connections, slowness, and other difficulties while attempting to stream video over the Cingular GPRS connection. What could be the problem?

Answer: Bandwidth over the Cingular GPRS network is somewhat restricted as compared to wired or 802.11x wireless connection types. Due to the demanding nature of streaming audio/video, it is not recommended that GPRS be used for either streaming video, or very large data downloads.

Question: I am experiencing difficulty reconnecting to my web browser when switching from the Cingular GPRS network to a WLAN connection. What could be the problem?

Answer: The network behind the WLAN's Access Point may be set up to use a proxy server. If this is the case, proxy settings entered for Internet Explorer over WLAN may prevent IE from connecting over a GPRS link.

To allow web browsing from either connection type:

- 1 Correctly configure IE proxy settings for use over the WLAN connection. Then, open the Cingular Connection Manager and right-click the "GSM" tab. Select "profiles" and then click on the "Edit" button.
- 2 From the "General" tab, make certain that the "Disable IE's manual proxy settings on connect" checkbox has been selected. Close the "Edit" screen and then close and reopen Internet Explorer. Remember to close and reopen IE each time you switch connection types in order to refresh proxy settings within Internet Explorer.

3 If you are still having trouble, contact your network administrator.

Question: I am seeing a message in Windows taskbar stating; "GPRS a Network Cable is Unplugged". What does this mean?

Answer: Typically, this message appears if your VAIO PC is connected to the Cingular GPRS network and is allowed to go into hibernation. Upon resuming, Cingular has terminated the connection. However, Windows information has not yet been updated to recognize this change and is unaware that your GPRS connection does not require a cable. You may either re-connect to Cingular, or simply cancel out of the message.

Question: Downloads sometimes appear to be slow when connecting to the Internet via CCM. What type of download speeds should I expect?

Answer: Since CCM operates over a cellular network and is subject to the same issues/conditions as cellular connections, bandwidth may vary greatly. Common download speeds ranging from 18~64Kbps are possible with 30~36Kbps rates as typical. However, these are only estimates and your actual experience will likely vary depending upon a number of environmental factors.

Question: What is meant by "RWIN" from the CCM Tools settings advanced networking section?

Answer: The TCP Receive Window size is the amount of 'receive' data (in bytes) that can be buffered at one time on a connection. RWIN (TCP Receive Window) can be changed by setting up the variables to optimize TCP. We recommend that this setting not be changed unless you are an expert or you have explicit instructions from your network administrator.

Changing the settings for this value also has an effect when using WLAN device or any device that depends on TCP connection.

□ Sonic Stage/Music Store

Question: I am unable to stream audio from some web sites such as Winamp©, Shoutcast©, etc. using Sonic Stage? Why is this the case?

Answer: Many of these web sites use proprietary players and use encoding formats that are not supported by other players. You can download one of these players if you wish, or try streaming from Sony ConnectTM Music

Store using Sonic Stage.

Question: Sonic stage appears to lock up indefinitely (displays a spinning 'LOADING' logo) when attempting to select "Radio Connect" (streaming) from Sony ConnectTM site.

Answer: This is related to the issue of streaming audio over low bandwidth connections as referenced above under "GPRS Networking". Connecting to Music Store over a wired or broadband connection will usually resolve this issue.

□ Bluetooth® technology

Question: Why do I not see the Bluetooth device that is connected to the computer from the BT Paired Device status box of the SmartWi Connection Utility?

Answer: It is most likely no Bluetooth devices have been configured for the system. Bluetooth devices are not configured automatically. To install or configure Bluetooth devices, follow the steps from the help section "Installing the Bluetooth device". We recommend obtaining the latest Bluetooth drivers.

Question: I can not connect to my Bluetooth keyboard (or other device). What could be the problem?

Answer: Make certain that you are using the most current drivers available for your Bluetooth device. Try reinstalling under the updated driver per the manufacturers instructions.

☐ Uninstall, Reinstall and Repair

Question: How do I uninstall the SmartWi application and all associated modules?

Answer: There are two components that should be uninstalled when removing the SmartWi application. The following steps should be observed while uninstalling the SmartWi application

- 1 Uninstall Cingular Connection Manager
- 2 Uninstall SmartWi connection Utility

Question: How do I reinstall the SmartWi or Cingular connection manager? **Answer:** Use the following instructions:

- 1 From the Windows taskbar click **Start** > **Control Panel** >**VAIO Recovery** >**Reinstall Application or drivers**
- 2 Click Next. Select Wireless Connection Utility and then click Next.

Question: I do not see a repair option for the SmartWi from the control panel. How do I repair the SmartWi and its associated modules?

Answer: At this time there is not a "Repair" option for the SmartWi and associated modules. To work around this, we recommend to uninstall SmartWi and the associated modules and then reinstall.

Question: If I uninstall and then reinstall the Cingular Connection Manager application, will the application lose the messages and phone book?

Answer: Uninstalling the Cingular Connection Manager application will not remove your messages or the phone book. After reinstallation has been completed, you are prompted to launch CCM and view the readme.html file. Click OK to launch CCM. Load SMS and advance to messages. Observe that the messages remain. Load the phone book, and notice that the contacts remain.

VAIO® Computer Wireless Information

For customer support information, go to:

http://www.esupport.sony.com/EN/VAIO

VAIO Homepage http://www.sony.com/vaiopc © 2006 Sony Electronics Inc. VAIO® Computer Wireless Information