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Welcome

Congratulations on your purchase of this Sony VAIO® computer, and welcome to the online VAIO® Computer User Guide.

This user guide provides detailed information on all aspects of using your new VAIO computer, from keyboard functions to preinstalled software programs.

In the left navigation window, click the topics you want to learn more about, and that information will be displayed in this main window.



View the Electronic Flyer, which provides updates and supplemental information about your computer.



View the VAIO® Computer Specifications, which lists your computer's hardware specifications and preinstalled software information, such as descriptions and contact information.

Powering Your Computer

Your VAIO® computer comes with a battery and an AC adapter. This chapter explains how to install and use these supplied accessories to power your computer. It also describes ways you can efficiently utilize the battery as a power source.

- ❑ Using AC Power
- ❑ Using Batteries
- ❑ Conserving Battery Power

Using AC Power

The supplied battery is not charged when you receive your computer. To use your computer immediately, use the supplied AC adapter as a power source. The computer charges the battery while you use AC power. See “Using Batteries” for more information on installing and using batteries.

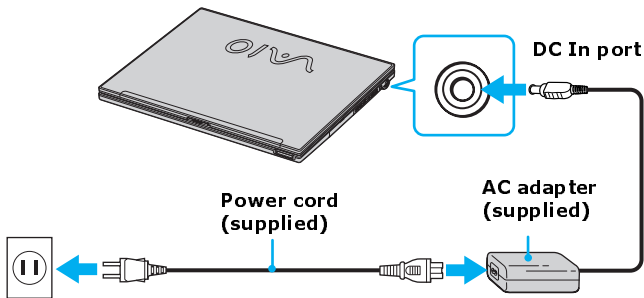
- ❑ Connecting the AC adapter
- ❑ Turning on the computer

Connecting the AC adapter


To connect the AC adapter

- 1 Plug the cable attached to the AC adapter into the DC In port on your computer or docking station.

Connecting the AC Adapter to the Computer



- 2 Plug one end of the power cord into the AC adapter, and plug the other end into an AC outlet.

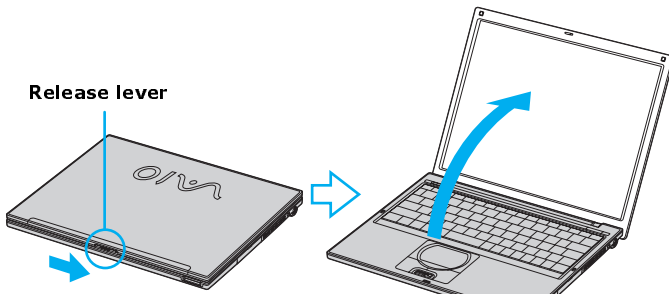
 Use only the supplied AC adapter with your computer.

Turning on the computer

To turn on the computer

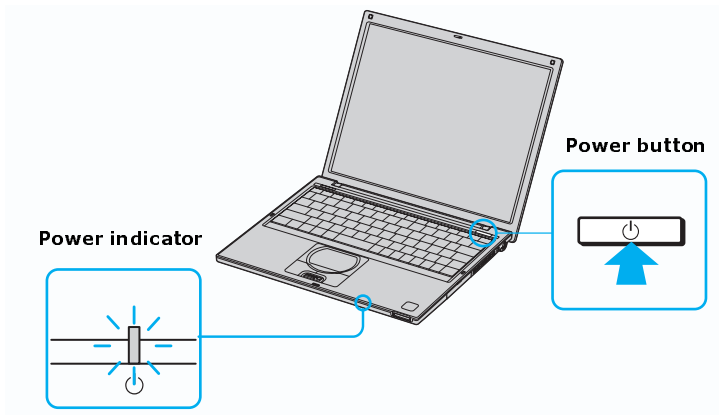
- 1 Slide the release lever to the right, and lift the cover while holding the bottom of the computer firmly.


Opening the Computer



- 2 Press the power button until the green power indicator lights up.

Turning on the Computer



 If you hold the power button down for more than four seconds, the computer turns off.

3 If necessary, adjust the brightness controls for the LCD display as follows:

- To increase light intensity, press **Fn+F5** and then **↑** or **→**.
- To decrease light intensity, press **Fn+F5** and then **↓** or **←**.

Using Batteries

A battery is an auxiliary power source you can use when your computer is not plugged into an AC outlet. Your computer may come equipped with one or two battery bays, depending on the model you purchased. If your computer comes with two battery bays, you can purchase a second rechargeable battery to extend your computing time. Regardless how many batteries you use, you can always extend the life of the battery by conserving power. See “Conserving Battery Power” for more information.

- Inserting a battery
- Removing a battery
- Displaying battery information
- Charging a battery
- Notes on batteries
- Frequently asked questions

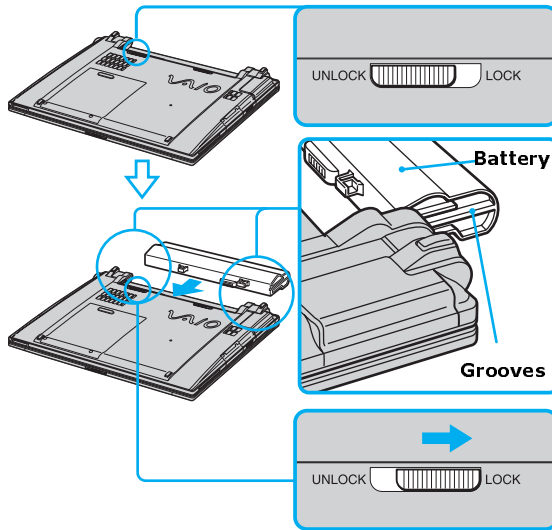
 The battery that comes with your computer is not charged at the time of purchase.

Inserting a battery


To insert a battery

- 1 Turn the computer over, and slide the LOCK/UNLOCK switches on the bottom of the computer to the UNLOCK position.
- 2 Align the grooves and tabs on the battery with those on the back of the computer.

Inserting a Battery



- 3 Slide the battery into the computer until it clicks into place.
- 4 Slide the LOCK/UNLOCK switch into the LOCK position.

 If the port replicator is attached to your computer, do not insert or remove the battery. Lifting and turning the computer with the port replicator attached could cause a temporary loss of power.

For some software programs and some peripheral devices, your computer may not enter Hibernate mode when the battery life is low. To avoid loss of data when using battery power, you should save your data frequently and manually activate a power management mode, such as Standby or Hibernate.

Removing a battery

If you are not using the computer for an extended period of time, remove the battery from the computer to avoid damaging the battery. You can remove the battery when the computer is on or off.

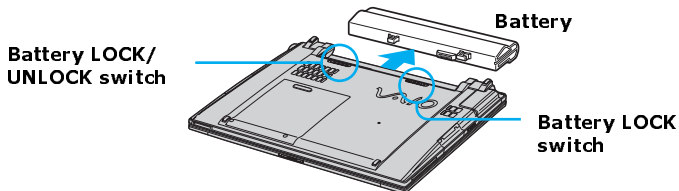


If the computer is on, connect the AC adapter and exit a power saving mode before you remove the battery.

To remove a battery

- 1 Turn the computer over, and slide the LOCK/UNLOCK switch on the bottom of the computer to the UNLOCK position.
- 2 Slide the battery away from the computer.

Removing a Battery



Displaying battery information

You can display the remaining battery charge on the Battery Information toolbar and/or the Battery Information window.

To display the Battery Information toolbar

- 1 Right-click the center of the Windows® taskbar.
- 2 Select **Toolbars** from the pop-up menu, and click **Battery Information**. The **Battery Information** toolbar appears on the taskbar.



If the **Battery Information** toolbar is hidden behind the taskbar icons, right-click the taskbar and click to cancel **Lock the Taskbar**, then click and drag the edge of the **Battery Information** toolbar to the left until it is in clear view.

The total charge remaining in the battery is listed in percent and real-time values. The following toolbar indicates that there is 100 percent or approximately 2 hours and 40 minutes of battery charge left.

Battery Information Toolbar




- ❑ **Percentage indicator** — Displays the percentage of the remaining capacity.
- ❑ **Time indicator** — Displays estimated time (hours : minutes) remaining before the battery fully discharges, also known as the time-to-empty.

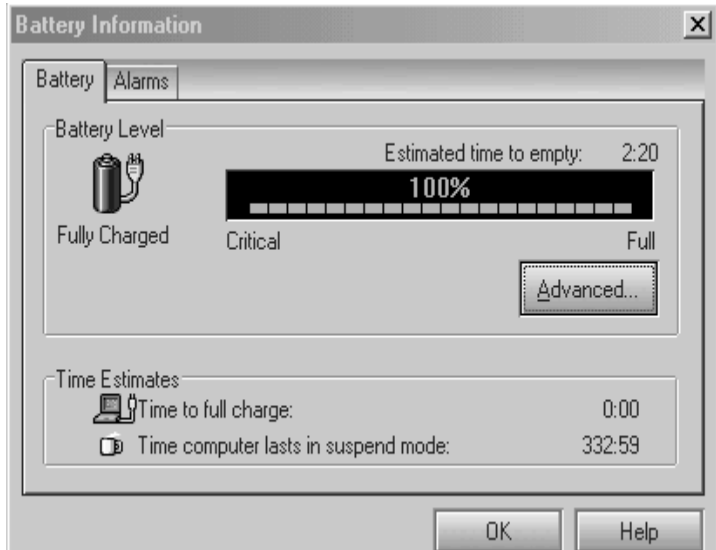
To close the Battery Information toolbar

- 1 Right-click the **Battery Information** toolbar.
- 2 Select **Toolbars** from the pop-up menu, and click to cancel **Battery Information**. The **Battery Information** toolbar disappears from the toolbar.


To display the Battery Information window

Double-click the **CPU** icon  on the Windows taskbar. The **Battery Information** window appears.

Battery Information Window



- ❑ **Battery tab** — Displays the total charge remaining in the battery. You can click **Advanced** for specific information on the battery.
- ❑ **Alarms tab** — Displays the alarm settings, which notify you when the battery is fully charged and is too low. You can change your computer's alarm settings on this window.

 Click **Help** in the lower right corner of the window for more information.

The battery icons that appear on the **Battery Information** toolbar and the **Battery Information** window indicate the current status of the installed battery.

Battery icon	Battery status
---------------------	-----------------------



Charging



Fully charged



Discharging



No battery


Charging a battery

You will need to charge the battery if battery power drops below 10 percent or you have not used the battery for a considerable amount of time. The lithium-ion battery supplied with your computer may be recharged at any time, whether you wait until the battery is completely or partially discharged. Charging a partially discharged battery does not affect battery life. If you charge the battery and find that battery power is still low, the battery may be reaching the end of its life, and you may need to replace it.

 The battery supplied with your computer is not charged at the time of purchase.


To charge a battery

You can charge the battery when the computer is on or off. However, the battery will charge faster when the computer is off. Charging the battery takes several hours. See your VAIO® Computer Specifications for the approximate time needed to charge your battery.

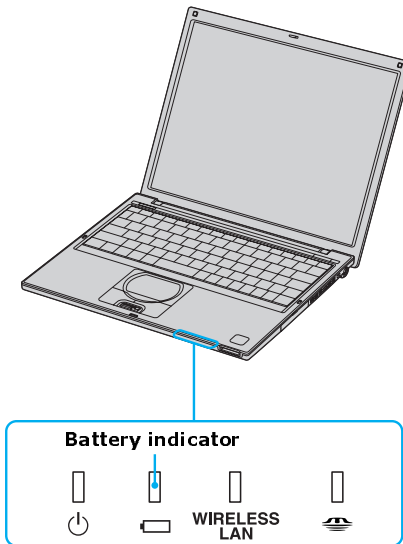
 Charge the batteries at temperatures between 50°F and 80°F (10°C to 30°C). Lower temperatures require a longer charging time.

- 1 Insert the battery into the battery bay. If you want to charge more than one battery, insert the second battery into the computer. See “Inserting a battery” for more information.
- 2 Connect the AC adapter to the computer. The computer automatically charges the battery as long as the computer is using AC power.

The battery indicator blinks in a double pattern while the battery charges. The battery indicator stops blinking when the battery is 85 percent full. To ensure the battery is 100 percent full, continue charging it for at least an additional hour after the indicator stops blinking.

 When using two batteries, the battery you insert first charges first. The second battery you insert begins charging when the first battery is 85 percent full.

Battery Indicator



Battery Indicator

Status	Description
On	The computer is using battery power.
Single blink	The battery is running out of power.
Double blink	The battery is charging.
Off	The computer is using AC power.

Notes on batteries

- ❑ Never leave the battery in temperatures above 140° F (60° C), such as under direct sunlight or in a car parked in the sun.
- ❑ While the battery is in use or being discharged, the battery heats up. This is normal and is not cause for concern.
- ❑ Keep the battery away from all sources of heat.
- ❑ Keep the battery dry.
- ❑ Do not open or disassemble the battery.
- ❑ Do not expose the battery to any mechanical shock.
- ❑ Battery life is shorter in a cold environment because of decreased battery efficiency at low temperatures.

Frequently asked questions

How do I know when the battery is charged?

To determine the remaining battery charge, see “Displaying Battery Information” in the online VAIO® Computer User Guide for more information.

When is the computer using AC power?

When the computer is directly connected to the AC adapter, it uses AC power, even if a battery is installed.

When should I recharge the battery?

- When the battery level falls below 10 percent.
- When both the battery and power indicators blink.
- When you have not used the battery for a considerable amount of time.

Conserving Battery Power

You may use the power saving modes and PowerPanel or power schemes to conserve battery power. Conserving battery power may significantly extend your computing time, depending on how you use your computer.

- ❑ Using power saving modes
- ❑ Using PowerPanel
- ❑ Frequently asked questions

Using power saving modes

In addition to the normal operating mode, which allows you to turn off specific devices, your computer has two distinct power saving modes: Standby and Hibernate. You can use the Standby and Hibernate power saving modes to override a profile setting or initiate an immediate action.


- ❑ **Standby** — Saves the state of the system and peripheral devices in memory (RAM). Power consumption reduces to a minimum, and the system remains on.
- ❑ **Hibernate** — Saves the state of the system and peripheral devices in the Save to Disk Partition on the hard disk and power is turned off. Power consumption reduces to a minimum, and the system is turned off. Hibernate mode consumes the lowest level of power. The computer automatically enters Hibernate mode when the remaining battery charge drops below 5 percent, regardless of the setting you select.

To activate Standby mode

- 1 Press the key combination **Fn+Esc** or **Fn+F12**. The amber power indicator flashes in this mode.
- 2 Press any key to return to Normal mode.







To activate Hibernate mode

- 1 Press the power button and release it immediately. Do not move the computer until the power indicator turns off.
- 2 Press the power button to return to normal mode.

 If the computer does not activate Hibernate mode, see “Frequently asked questions” for more information.

Using PowerPanel

The PowerPanel utility enables you to select and customize a predefined power management profile to conserve battery life. The following table describes all the predefined power management profiles in PowerPanel. Your computer is set to Automatic Profile Selection by default. You can customize the settings for all the following profiles, except the Disable Power Management profile.

Profile Icon	Description
	<p>Maximum Performance Provides the best system performance while still conserving power.</p>
	<p>Maximum Battery Life Provides power saving features to give you maximum battery life and good performance. It slows the computer and puts it into Standby mode after a specified time period.</p>
	<p>Ultimate Battery Life* Extends the Maximum Battery Life by disabling the i.LINK port.</p>
	<p>Power Management Off Disables all power management settings, such as Standby and Hibernate modes. You cannot change the settings of this profile.</p>
	<p>AC Power Indicates when AC power is in use. Similar to the Power Management Off setting. Power Management automatically loads the AC profile unless you disable this feature.</p>
	<p>Games Disables the display and the Hard Disk Standby timer.</p>

**Profile
Icon**

Description



Presentation

Keeps the display on at all times while it conserves power. This option is ideal for slide show presentations. You can establish settings for LCD (Video) Standby, Hard Disk Standby, and Standby mode to optimize power management for your system.



Camera

Optimizes performance and power requirements for camera usage.



DVD

Optimizes performance and power requirements for DVD usage.



Word Processing

Optimizes power management with longer time-outs on the hard disk and display screen. You can also establish settings for LCD (Video) Standby, Hard Disk Standby, and Standby mode to optimize power management for your system.



Spreadsheet

Optimizes performance and power requirements for spreadsheet programs.



Communications

Extends battery life by initiating a quick display time-out. The Internal modem remains powered. You can also establish settings for LCD (Video) Standby, Hard Disk Standby, and Standby mode to optimize power management for your system.



Automatic Profile Selection


Switches automatically to a profile suitable for active software programs.

* On selected models.




Do not choose the Automatic Profile Selection when connected to AC power.

To select a profile


- 1 Right-click the **CPU** icon  on the Windows taskbar.
- 2 Select **Profiles** from the pop-up menu.
- 3 Click the profile on the pop-up list. The profile settings are implemented instantly. See “Using PowerPanel” for descriptions on available profiles.

When you use the battery to power your computer, your system automatically selects the Maximum Battery Life power management profile by default. If you select a different power management profile while using battery power, that profile is selected automatically the next time you use the battery to power your computer.

 See the PowerPanel help file for information on customizing the power management profiles.

To customize your profile settings

You can customize your profile settings to sustain enough power for a particular computing function.

- 1 Right-click the **CPU** icon  on the Windows® taskbar.
- 2 Select **Edit/Create Profiles** from the pop-up menu.
- 3 In the left panel, select the profile that you want to change.
- 4 Right-click the setting under **System**, **LCD(Video)**, **Hard Disk**, or **Other Devices** that you want to change. See the following table for a description of each setting.
- 5 Make your changes from the shortcut menu.
- 6 Click **File**, and click **Save**.

Power profile **Description**

CPU Control* Sets the processor speed. You can select either **Performance**, **Adaptive**, **Battery Life**, or **More Battery Life**. These selections are listed in order from the greatest to least amount of power consumed.

System Standby Timer Sets the time it takes the system to activate the Standby mode when it is idle. The longer you allow the computer to sit idle while it is not in a power saving mode the more power the computer will consume.

Hibernate Timer Sets the time it takes the system to activate the Hibernate mode when it is idle. The longer you allow the computer to sit idle while it is not in a power saving mode the more power the computer consumes. Hibernate mode conserves more power than Standby mode.

Thermal Control Strategy¹ Sets the speed of the processor fan. You can adjust the fan speed to **Quiet**, which is the lowest setting, or **Performance**.

Lid Close Action Sets the state of your system when you close the computer's lid. You can select either **Standby** or **Hibernate** mode, or you can select **LCD Off**. Hibernate or LCD Off conserves the most power.

Hibernate on Low Battery Sets the state of your system when the battery power is low. You can turn this setting On or Off.

LCD Brightness Sets the brightness of the LCD screen. You can select a brightness level of one to nine, with one being the darkest setting. The darker you set the LCD screen, the more power you conserve.

LCD Standby Timer Sets the time it takes the system to activate the Standby mode for the LCD when the system is idle. This setting only shuts off power to the LCD. The system itself still functions on full power.

Power profile **Description**

HDD Standby Timer Sets the time it takes the system to activate the Standby mode for the hard disk drive when the system is idle. This setting only shuts off power to the hard disk drive.

i.LINK Port Sets the power to the i.LINK port. If you do not use the i.LINK port, you can disable power to this port to conserve battery power.

Memory Stick Port Power-saving Sets the power to the Memory Stick slot. If you do not use a Memory Stick, disable power to this slot to conserve battery power.

* Slows the processor speed.

Frequently asked questions

Can my computer enter Hibernate mode while using battery power?

For some software programs and some peripheral devices, your computer may not enter Hibernate mode when the battery life is low. To avoid loss of data when using battery power, you should save your data frequently and manually activate a power management mode, such as Standby or Hibernate.

When should I replace the battery?

If, after fully charging the battery, the battery power is still low, the battery may be reaching the end of its life and should be replaced.

Why is the battery warm?

While the battery is in use or being discharged, the battery heats up. This is normal and is not cause for concern.

Internet and Network Connections

- ❑ Internet Connections
- ❑ Network Connections
- ❑ Connecting another VAIO Computer

Internet Connections

This section describes the basic steps for setting up your dial-up or Ethernet connection to the Internet. The New Connection Wizard guides you through the process of connecting to the Internet and choosing an Internet service provider (ISP) or setting up an existing account. When you connect to the Internet, you can register your VAIO® computer, use online services, and gain access to Sony Computing Support.

- Setting up a dial-up Internet connection
- Setting up an Ethernet Internet connection
- Customizing your Internet connection
- Frequently asked questions

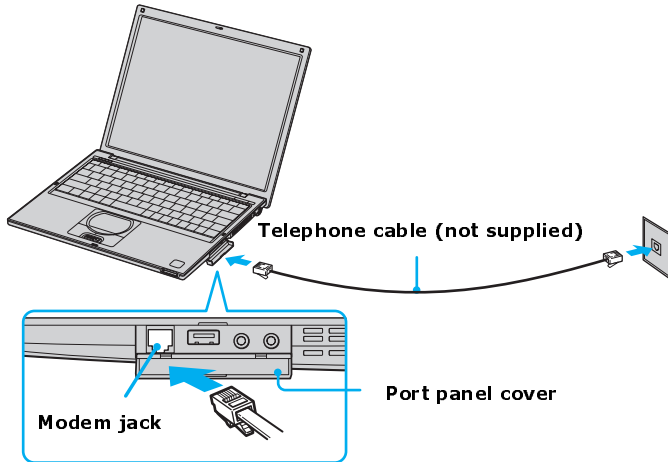
Setting up a dial-up Internet connection


Before you can connect to the Internet, you need to connect your computer to a telephone jack via a telephone cable (not supplied). Once you have set up your telephone cable, you're ready to connect to the Internet.

To connect a telephone cable

- 1 Locate the Modem jack on your computer. For location information, see Locating Ports and Controls in the Setting Up chapter of your printed VAIO® Computer Quick Start guide.
- 2 Plug one end of the telephone cable into the Modem jack. Make sure it clicks into place.
- 3 Plug the other end into the wall jack.

Connecting a Telephone Cable



 Your computer does not work with party lines, cannot be connected to a coin-operated telephone, and may not work with multiple telephone lines or a private branch exchange (PBX). Some of these connections may result in excess electrical current and could cause a malfunction in the internal modem.

If you connect a telephone cable coming through a splitter, the modem or connected device may not work properly.

To set up a dial-up connection to the Internet

- 1 Connect your computer to a telephone jack. See “To connect a telephone cable” for more information.
- 2 Click **Start**, point to **All Programs, Accessories, Communications**, and click **New Connection Wizard**. The **New Connection Wizard** appears.

The New Connection Wizard



- 3 Click **Next**.
- 4 If it is not already selected, click to select **Connect to the Internet**, and click **Next**.
- 5 Follow the on-screen instructions.

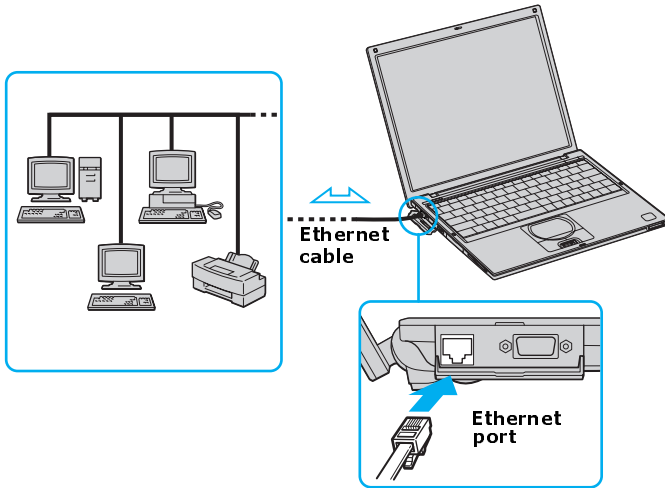
Setting up an Ethernet Internet connection


Your computer accommodates both 10BASE-T and 100BASE-TX Ethernet connections, with data transfer speeds of between 10 and 100 Mbps, depending on the line conditions and Ethernet cable.

To connect an Ethernet cable

- 1 Locate the Ethernet port on your computer. For location information, see Locating Ports and Controls in the Setting Up chapter of your printed VAIO® Computer Quick Start guide.

Connecting an Ethernet Cable



- 2 Plug one end of the Ethernet cable into your computer's Ethernet port  and the other into the network connection.



Your computer does not work with party lines, cannot be connected to a coin-operated telephone, and may not work with multiple phone lines or a private branch exchange (PBX). Some of these connections may result in excess electrical current and could cause a malfunction in the internal modem.

If you connect a telephone cable via a splitter, the modem or connected device may not work properly.

To set up an Ethernet connection to the Internet

- 1 Connect your computer to a network connection. See “To connect an Ethernet cable” for more information.
- 2 Click **Start**, point to **All Programs, Accessories, Communications**, and click **New Connection Wizard**. The **New Connection Wizard** appears.

The New Connection Wizard



- 3 Click **Next**.
- 4 If it is not already selected, click to select **Connect to the Internet**, and click **Next**.
- 5 Follow the on-screen instructions.

Customizing your Internet connection

The Internet Properties dialog box enables you to change the way you view the Internet. You can change your home page, fonts, language, and colors. You can also regulate content and set your browsing preferences.

To open the Internet Properties dialog box

- 1 Click **Start** on the Windows® taskbar, and then **Control Panel**.
- 2 Click **Network and Internet** connections, and then **Internet Options**. The **Internet Properties** dialog box appears.

Frequently asked questions

Why doesn't my modem work?

- Make sure the telephone cable is plugged into the cable jack. See “To connect a telephone cable” for more information.
- Make sure the telephone cable is working by plugging the cable into an ordinary telephone and listening for a dial tone.
- Make sure the telephone number the program is dialing is correct.
- Make sure the software you are using is compatible with the computer's modem. (All preinstalled Sony programs are compatible.)
- If you are still experiencing problems, use the supplied Application Recovery CD(s) to reinstall the modem drivers. See “Using the Application Recovery CD(s)” for more information.

Why is my modem connection slow?

Your computer is equipped with a V.90 compatible modem. Many factors may influence modem connection speed, including telephone line noise or compatibility with telephone equipment, such as fax machines or other modems. If you think your modem is not connecting properly to other PC-based modems, fax machines, or your Internet Service Provider (ISP), follow these steps:

- Ask your telephone company to verify your telephone line is free of any line noise.
- If your problem is fax-related, make sure there are no problems with the fax machine you are calling and that it is compatible with fax modems.

- ❑ If you are having a problem connecting with your ISP, make sure the ISP is not experiencing technical problems.
- ❑ If you have a second telephone cable available, try connecting the modem to that cable.

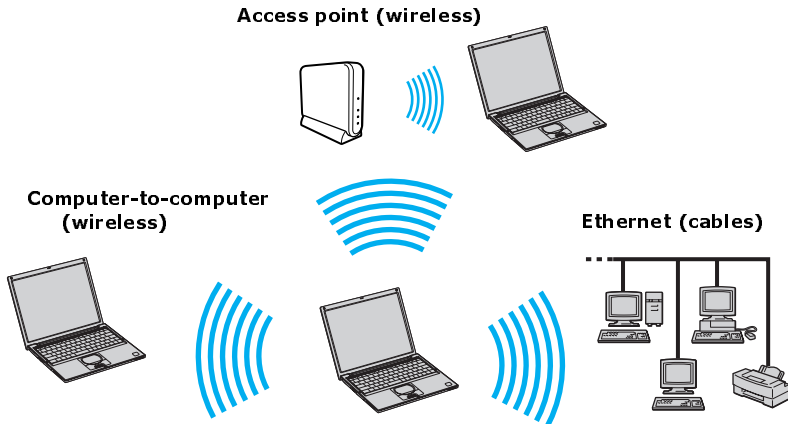
Network Connections

With a Sony computer, you can easily set up or connect to a variety of networks. The New Connection Wizard and Network Setup Wizard make it easy to gain access to remote and local area networks (LANs) using wireless, Ethernet, or dial-up connections.

For more information about networking, click **Start, Help and Support**, and then **Networking and the Web**.

- Using Ethernet and dial-up connections
- Using wireless LAN connections
- Checking your network connection status
- Frequently asked questions

Types of Networks



Using Ethernet and dial-up connections

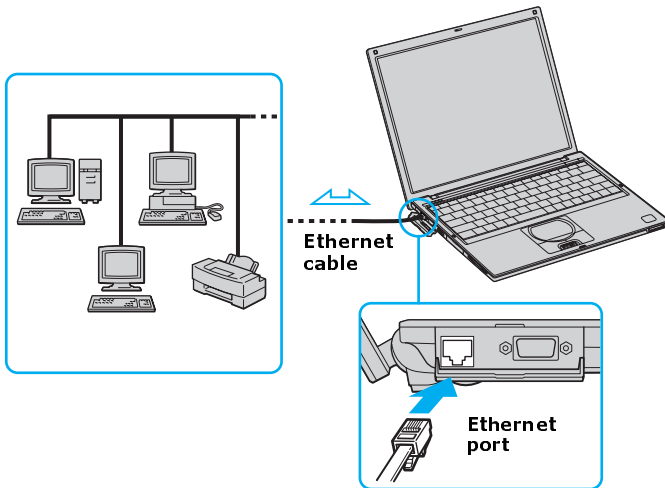
Local area networks (LANs) comprise a group of computers and associated devices within a small geographic area, such as a home or office building. For setting up LANs, Ethernet is a widely installed technology. Your computer

accommodates both 10BASE-T and 100BASE-TX Ethernet connections, with data transfer speeds of between 10 and 100 Mbps, depending on the Ethernet cable.

To set up an Ethernet LAN

- 1 Plug one end of the Ethernet cable into your computer's Ethernet port and the other into the network connection.

Connecting an Ethernet Cable



- 2 Click **Start**, point to **All Programs, Accessories, Communications**, and click **Network Setup Wizard**. The **Network Setup Wizard** appears.


The Network Setup Wizard



3 Click **Next**.

4 Follow the on-screen instructions.



Warning: Only connect 10BASE-T and 100BASE-TX cables to the Ethernet port . Do not connect any other type of network cable or any telephone cable. Connecting cables other than those listed above may result in an electric current overload and could cause a malfunction, excessive heat, or fire in the port. To connect the unit to the network, contact your network administrator.

You can connect to your company network from a remote location and use data, applications, and network resources. See Microsoft® Windows® Help by clicking **Help and Support** for the **Start** menu, and then clicking **Networking and the Web** in the left panel.

To connect to a remote network using a telephone or Ethernet cable

- 1 Connect an Ethernet or telephone cable to your computer. See “To connect an Ethernet cable” and “Setting up a dial-up Internet connection” for more information.
- 2 From the **Start** menu, point to **All Programs, Accessories, Communications**, and click **New Connection Wizard**.
- 3 Click **Next**. If you are prompted to the **Local Information** dialog box, follow the on-screen instructions.
- 4 Click **Connect to the network at my workplace**, and then click **Next**.
- 5 Follow the on-screen instructions.
- 6 Ask your network administrator for the detailed settings and devices needed to connect to an existing network.


Using wireless LAN connections

A wireless local area network (LAN) is a network in which you can connect to a LAN through a wireless (radio) connection. You can opt to purchase a Sony Wireless LAN Access Point to set up a LAN.

The Wireless LAN Access Point is designed for building a wireless LAN environment. Because a wireless LAN configuration requires no wiring, you can operate multiple computers more freely than ever before.

Your computer’s wireless capabilities support the IEEE 802.11b standard. Devices connecting to a Wireless LAN using the IEEE 802.11a standard cannot connect to devices using the IEEE 802.11b standard.

You can also purchase an external Wireless LAN PC Card separately, but your computer (depending on the model you purchased) may already come with a built-in mini PCI card that allows for wireless connections. See your VAIO® Computer Specifications for information about your computer’s wireless capabilities. The Wireless LAN PC Card is designed for a wireless LAN environment. You can use the Wireless LAN PC Card with or without the access point.

 For more information on Sony Wireless LAN, go to <http://www.sonymstyle.com/vaio>.

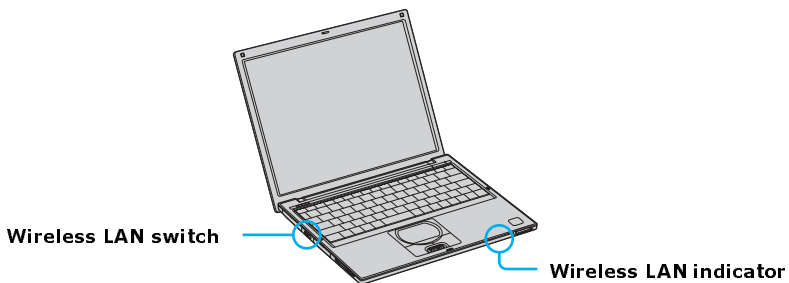
There are two types of wireless connections:

- ❑ An infrastructure network is one that extends an existing wired local network to wireless devices by providing an 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.
- ❑ A computer-to-computer (ad-hoc) network is one in which a local network is created only by the wireless devices themselves, with no other central controller or access point. Each device communicates directly with other devices in the network. You can set up an ad-hoc network easily at home.

To connect to an existing wireless network

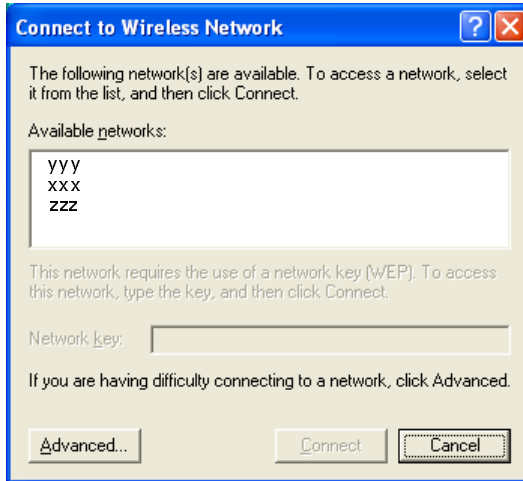
- 1 Move the Wireless LAN switch to ON or insert a Wireless LAN PC Card into the PC Card slot. See “Inserting PC Cards” for more information. The Wireless LAN indicator lights up.

Connecting to a Wireless LAN



- 2 From the **Start** menu, click **Control Panel**.
- 3 Click **Network and Internet Connections**, and then click **Network Connections**.
- 4 Double-click **Wireless Network Connection**. The **Connect to Wireless Network** dialog box appears.

Connecting to a Wireless LAN

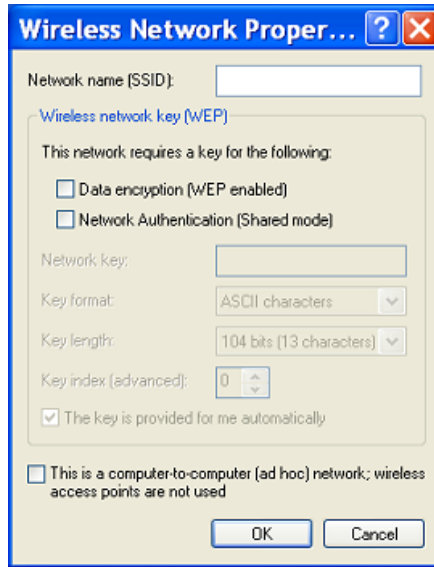


- 5 Select a network from the **Available networks** list box.
- 6 Type the network key of the available network in the **Network key** box. See your network administrator for this information.
- 7 Click **Connect**.

To set up a wireless network

- 1 Move the Wireless LAN switch to ON or insert a Wireless LAN PC Card into the PC Card slot. See “Inserting PC Cards” for more information. The Wireless LAN indicator lights up.
- 2 From the **Start** menu, click **Control Panel, Network and Internet Connections**, and then click **Network Connections**.
- 3 Right-click **Wireless Network Connection**, and select **Properties**. The **Wireless Network Connection Properties** dialog box appears.
- 4 Click the **Wireless Networks** tab, and then click **Add**. The **Wireless Network Properties** dialog box is updated.

Setting Wireless Network Connection Properties

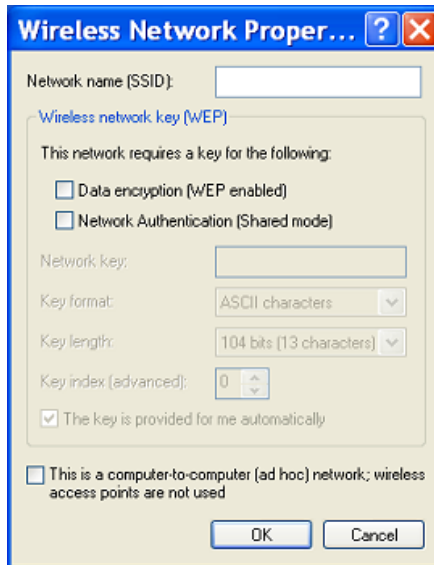


- 5 Type up to 32 ASCII characters in the **Network name (SSID)** box.
- 6 Click to select the **Data encryption (WEP enabled)** check box.
- 7 Click to select the **Network Authentication (Shared mode)** check box.
- 8 Click to cancel the **The key is provided for me automatically** check box.
- 9 Type between 5 and 13 ASCII characters or 10 to 26 hexadecimal characters in the **Network key** box.
- 10 Click **OK**. Your new network name appears in the **Preferred networks** list box.

To set up a computer-to-computer (ad-hoc) network

- 1 Move the Wireless LAN switch to ON or insert a Wireless LAN PC Card into the PC Card slot. See “Inserting PC Cards” for more information. The Wireless LAN indicator lights up.
- 2 From the **Start** menu, click **Control Panel, Network and Internet Connections**, and then click **Network Connections**. The **Network Connections** window appears.
- 3 Right-click **Wireless Network Connection**, and select **Properties**. The **Wireless Network Connection Properties** dialog box appears.
- 4 Click the **Wireless Networks** tab, and then click **Add**. The **Wireless Network Properties** dialog box is updated.


Setting Wireless Network Connection Properties



- 5 Type up to 32 ASCII characters in the **Network name (SSID)** box.
- 6 Click to select the **Data encryption (WEP enabled)** check box.
- 7 Click to select the **Network Authentication (Shared mode)** check box.

- 8 Click to cancel the **The key is provided for me automatically** check box.
- 9 Type between 5 to 13 ASCII characters or 10 to 26 hexadecimal characters in the **Network key** box.
- 10 Click to select the **This is a computer-to-computer (ad-hoc) network; wireless access points are not used** check box.
- 11 Click **OK**. Your new network name appears in the **Preferred networks** window.


To disconnect from a wireless network

- ❑ For computers with built-in Wireless LAN functionality, open the **Wireless Network Connection Status** window, and click **Disable**. See “Checking your network connection status.” Move the Wireless LAN switch to the OFF position. The Wireless LAN indicator turns off.
- ❑ For Wireless LAN PC Card connections, open the **Wireless Network Connection Status** window, and click **Disable**. See “Checking your network connection status.” Follow these steps to remove the Wireless LAN PC Card:
 - 1 Double-click the **Safely Remove Hardware** icon  on the taskbar. The **Safely Remove Hardware** window appears.
 - 2 Select the appropriate device name in the **Hardware devices** window, if it is not already selected, and click **Stop**. The **Stop a Hardware device** window appears.
 - 3 Make sure the appropriate device name is selected, and click **OK**. A message appears stating it is now safe to remove the hardware device.
 - 4 Remove the PC Card. See “Removing a PC Card” for more information.

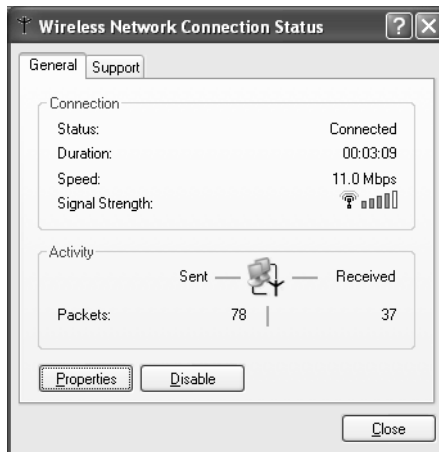


Turning off the Wireless LAN functionality while accessing remote documents, files, or resources may result in data loss.

Checking your network connection status

Whether you have a wireless, Ethernet, or dial-up connection, you can check the status of that connection by double-clicking the Wireless Network Connection icon  on your taskbar. The Wireless Network Connection Status window opens.

Wireless Network Connection Status Window



Frequently asked questions

Why can't my computer connect to a Wireless LAN Access Point?

- ❑ Connection availability is affected by distance and obstructions. You may need to move your computer away from obstructions or closer to any access point you may be using.
- ❑ Make sure the Wireless LAN switch on the computer is in the ON position or the Wireless LAN PC Card is properly inserted.
- ❑ Make sure power to the access point is on.
- ❑ Make sure the access point is displayed in the **Available networks** window.

- 1 From the **Start** menu, click **Control Panel, Network and Internet Connections**, and then **Network Connections**.
 - 2 Right-click **Wireless Network Connection**, and select **Properties**. The **Wireless Network Connection Properties** dialog box appears.
 - 3 Select the **Wireless Networks** tab, and make sure the access point is displayed in the **Available networks** box. If it is not displayed, see “To connect to an existing wireless network” for more information.
- Make sure the encryption key is correct.

Why can't I access the Internet?

- Make sure the Wireless LAN PC Card is properly inserted into the PC Card slot.
- Check the access point settings. Refer to the instructions supplied with the access point.
- Make sure your computer and the access point are connected to one another.
- Move your computer away from obstructions or closer to any access point you may be using.
- Make sure your computer is properly configured for Internet access.

Why is the data transfer speed slow?

- The Wireless LAN data transfer speed is affected by distance and obstructions between devices and access points. Other factors include device configurations, radio conditions, and software compatibility. To maximize the data transfer speed, move your computer away from obstructions or closer to any access point you may be using.
- If you are using a Wireless LAN Access Point, the device may be temporarily overloaded depending on the number of other devices communicating via the access point.
- If your access point interferes with other access points, change the access point channel. See your access point instructions for more information.

Why is the communication speed interrupted or slowed down when MPEG2 data is transferred?

The typical effective data transfer speed via an access point is 4-5 Mbps when adhering to the IEEE 802.11b standard. High-rate stream transfers with MPEG2 data may lower this rate.

How do I avoid data transfer interruptions?

- ❑ Data transfer interruptions may occur with large files or use of microwaves and cordless telephones when connected to an access point.
- ❑ Move the computer closer to the access point.
- ❑ Make sure the access point connection is intact.
 - 1 From the **Start** menu, click **Control Panel, Network and Internet Connections**. The **Network and Internet Connections** window appears.
 - 2 Click **Network Connections**. The **Network Connections** window appears.
 - 3 Check the connection status.
- ❑ Change the access point channel. See your access point instructions for more information.

Can I connect to an IEEE 802.11a device?

Your computer's wireless capabilities support the IEEE 802.11b standard. Devices connecting to a Wireless LAN using the IEEE 802.11a standard cannot connect to devices using the IEEE 802.11b standard.

What are channels?

Wireless LAN communication occurs on divided frequency bands known as channels. Third-party Wireless LAN Access Point channels may be preset to different channels from Sony devices.

If you are using a Wireless LAN Access Point, refer to connectivity information contained in your access point instructions.

Connecting another VAIO Computer


The preinstalled Microsoft® Windows® XP operating system enables you to connect a compatible i.LINK®* cable (not supplied) between your VAIO computer and another compatible computer.

- Connecting VAIO computers
- Disconnecting VAIO computers
- Frequently asked questions

Connecting VAIO computers

When you connect two VAIO computers, you can use one computer to edit, copy, or delete files on the other computer. You can also print from a printer attached to either computer.

To connect VAIO computers


- 1** Plug one end of the i.LINK cable into the i.LINK port  on each computer.
- 2** Click **Start** on the Windows® taskbar, and click **Control Panel**.
- 3** Click **Network and Internet Connections**, and click **Set up or change your home or small office network**. The **Network Setup Wizard** appears.

* i.LINK is a trademark of Sony used to designate that a product contains an IEEE 1394 connection. The i.LINK connection may vary, depending on the software programs, operating system, and compatible i.LINK devices. All products with an i.LINK connector may not communicate with each other. Refer to the documentation that came with your compatible i.LINK device for information on operating conditions and proper connection. Before connecting compatible i.LINK PC peripherals to your system, such as a CD-RW or hard disk drive, confirm their operating system compatibility and required operating conditions.

The Network Setup Wizard window

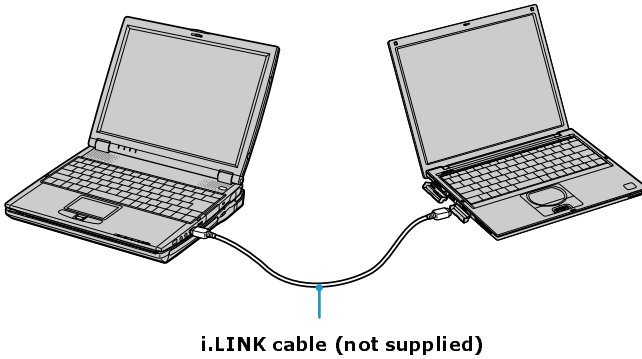


- 4 Follow the on-screen **Network Setup Wizard** instructions.
- 5 When you are prompted, type in a unique computer name for each computer. You will use this unique name to differentiate the two computers once they are networked together.

 The Workgroup name should remain the same for the two networked computers.

- 6 When you finish the **Network Setup Wizard** on-screen instructions, click **Start** on the Windows® taskbar and click **My Computer**.
- 7 Click **My Network Places** in the **Other Places** menu. The **My Network Places** window appears.
- 8 Click **View workgroup computers** in the **Network Tasks** menu. The computers that are networked under the same workgroup name are displayed in this window.

Connecting Another Computer



Disconnecting VAIO computers

You can disconnect two VAIO computers when the computers are on or off.

To disconnect VAIO computers when the computers are on

- 1 Close all open files that are shared with the connected computers.
- 2 Unplug the i.LINK cable from the i.LINK port on each computer.

To disconnect VAIO computer when the computers are off

- ❑ Unplug the i.LINK cable from the i.LINK port on each computer.

Frequently asked questions

Why can't I establish a connection between two VAIO computers?

- ❑ Your computer may not recognize an i.LINK* connection if the i.LINK cable is not plugged securely into the i.LINK ports. Disconnect the i.LINK cable and securely reconnect it to both computers. If neither computer responds after a few moments, restart both computers.
- ❑ If the computers do not recognize the i.LINK connection after resuming from a power saving mode (Standby or Hibernate), restart both computers.

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CDs, DVDs, and Optical Drives

- ❑ Connecting External Optical (Disc) Drives

- ❑ Inserting and Ejecting CDs or DVDs
- ❑ Copying and Playing CDs

Connecting External Optical (Disc) Drives


Depending on the model you purchased, your computer may come equipped with a built-in optical drive. If not, you can purchase an external optical drive, such as PC Card or i.LINK* drives, and connect it to your computer, so you can write to and read CDs and DVDs. If you wish to purchase an external optical drive, shop Sony online at <http://www.sonymstyle.com/vaio> or contact your local retailer.


 The Sony i.LINK optical drive is only compatible with certain Sony VAIO® PCG series computers that are preinstalled with Microsoft® Windows® XP Home Edition or Professional software.

- i.LINK optical (disc) drives
- PC Card optical (disc) drives
- Frequently asked questions

i.LINK optical (disc) drives

The i.LINK drive enables you to read data stored on a DVD or CD. Your computer may come with an external i.LINK drive, depending on the model you purchased. Once the i.LINK drive is connected, you can use the preinstalled software to create CDs or play DVDs.

The i.LINK optical drive draws power from the computer through a peripheral cable. You must connect the peripheral cable to both the  i.LINK port and DC OUT jack on your computer.†

 Do not use the i.LINK optical drive and the PC Card drive at the same time. Connecting both devices may cause the computer to malfunction.

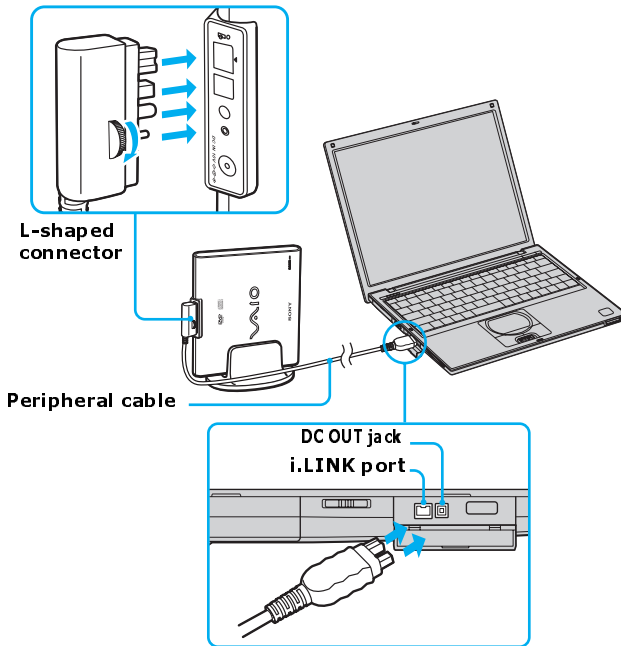
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† If you connect and use an i.LINK optical drive when your computer is running on battery power, the battery life will be reduced.

To connect an i.LINK optical drive

- 1 Close any active programs to prevent data loss.
- 2 Turn on power to the computer.
- 3 Insert the L-shaped connector on the peripheral cable (supplied with the i.LINK optical drive) into the matching port on the rear panel of the i.LINK optical drive.

Connecting the i.LINK optical drive




- 4 Turn the LOCK device clockwise to secure the L-shaped connector.
- 5 Insert the two-prong peripheral cable connector into both the i.LINK port and DC OUT jack on the computer. The i.LINK drive power indicator turns on, and the computer automatically detects the connected drive.
- 6 Restart your computer.

To gain access to the i.LINK optical drive


- 1 Click **Start** on the Windows® taskbar, and click **My Computer**. The **My Computer** window appears.
- 2 Double-click **DVD/CD-RW Drive**. The **DVD/CD-RW Drive** window appears.

To disconnect the i.LINK optical drive

- 1 Close any active programs to help prevent data loss.
- 2 Double-click the **Safely Remove Hardware** icon  on the taskbar. The **Safely Remove Hardware** window appears.
- 3 Select the i.LINK drive in the **Hardware devices** window, if it is not already selected.
- 4 Click **Stop**. The **Stop a Hardware device** window appears.
- 5 Make sure the i.LINK drive is selected, and click **OK**. A message appears stating it is now safe to remove the hardware device.
- 6 Unplug the i.LINK optical drive from the computer, port replicator, or docking station.

PC Card optical (disc) drives

The PC Card drive enables you to read data stored on a DVD or CD. Your computer may come with an external PC Card drive, depending on the model you purchased. Once the PC Card drive is connected, you can use the preinstalled software to create CDs or play DVDs.


 Do not use the i.LINK optical drive and the PC Card drive at the same time. Connecting both devices to may cause the computer to malfunction.



If you connect a non-Sony DVD drive to your VAIO® computer, DVD playback may not function properly. The DVD software (supplied) must be installed to play a DVD. For best performance, use a Sony compatible DVD drive.

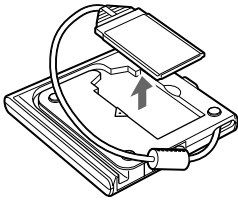
To connect an optical drive

You can connect a PC Card drive while the computer is turned on. Connecting the drive when the computer is in a power saving mode (Standby or Hibernate) may cause the computer to malfunction.

 Instructions on connecting an optical drive may vary, depending on the specific drive you purchased.

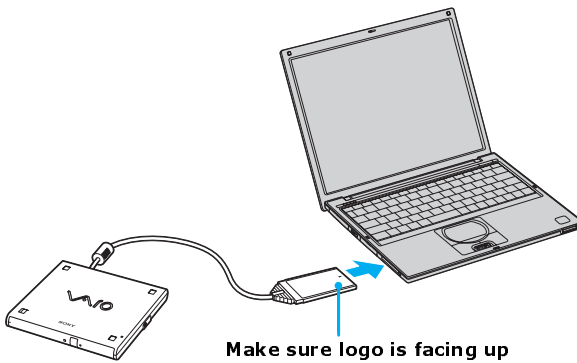
- 1 Remove the PC Card from the bottom of the optical drive.

Removing a PC Card



- 2 Insert the PC Card into the PC Card slot with the logo facing up. See “Inserting PC Cards” for more information.


Inserting a PC Card



 Remove the protective cover that is attached to the lens of the optical drive before you use the drive. See “Inserting and Ejecting CDs or DVDs” for information on how to open the optical drive to access the lens.

See the manual that accompanied your optical drive for more information on its installation and use.

To disconnect the PC Card drive

- 1 Close any active programs to help prevent data loss.
- 2 Double-click the **Safely Remove Hardware** icon  on the taskbar. The **Safely Remove Hardware** window appears.
- 3 Select the PC Card drive on the **Hardware devices** window, if it is not already selected, and click **Stop**. The **Stop a Hardware device** window appears.
- 4 Select the PC Card drive, and click **OK**. A message appears stating it is now safe to remove the hardware device.
- 5 Disconnect the PC Card drive from the computer.


Frequently asked questions

Why isn't my i.LINK drive playing a CD or DVD properly?

The i.LINK optical drive will not play a CD or DVD if the disc was inserted with the label facing down. Eject the CD or DVD from the drive, and make sure the label is facing up. The disc will also not play properly under the following circumstances:

- The disc requires a particular software that is not already installed on your computer. Install that software according to the manufacturer's instructions.
- The DVD is not compatible with the optical drive and a region code warning appears when you try to play it. Make sure the region code listed on the DVD package is compatible with the drive.

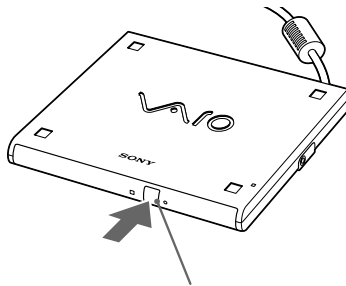
Inserting and Ejecting CDs or DVDs

 Avoid using adhesive labels to identify your CDs or DVDs. Adhesive labels may damage the optical drive if they come off while the disc is in the drive.

To insert a CD or DVD


- 1 Turn on the computer, and exit a power saving mode (Standby or Hibernate) if one is active. For more information on power saving modes, see “Using power saving modes” for more information.
- 2 Press the Eject button on the optical drive cover to open the drive tray. The drive tray slides out.

Ejecting the drive tray

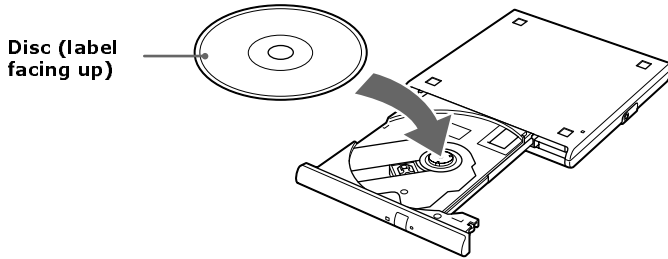


Eject button

- 3 Place a disc on the drive tray with the label facing up.

 You can play some DVDs on both sides. Insert this type of DVD with the side you want to play facing up.

Inserting a Disc



- 4 Press the disc onto the hub until the disc clicks securely into place.



If you do not seat the disc firmly over the hub, the disc may come loose while it is in the drive. A loose disc may damage the optical drive and make opening the drive tray difficult.

- 5 Push the drive tray gently to close it. The Busy indicator on the drive flashes while your computer is reading data from the drive.

To ejecting a CD or DVD

- 1 Turn on the computer, and exit a power saving mode (Standby or Hibernate) if one is active. See “Using power saving modes” for more information on power saving modes.
- 2 Close all software programs that are open from the optical drive, and wait for the LED indicator to turn off.
- 3 Press the Eject button on the optical drive cover to open the drive tray. The drive tray slides out.



If the Eject button does not work, turn off the computer and insert a thin, straight object (such as a paper clip) into the manual eject hole next to the Eject button.

- 4 Lift the disc from the drive.
- 5 Push the drive tray gently to close it.

Copying and Playing CDs

Your optical drive can read CDs and DVDs. The type of optical drive installed in or connected to your computer may vary, depending on the model you purchased. If you are using a CD-RW/DVD Combo Drive, you can write data to CD-Rs and CD-RWs.

- Playing CDs
- Copying files to a CD-RW or CD-R



Do not remove the optical drive when the computer is in a power saving mode (Standby or Hibernate). Doing so may cause the computer to malfunction.



If you plan to use an external optical drive, connect the drive before you begin.

Playing CDs

Before you play an audio CD, you may need to enable your computer's audio feature.

To enable the audio feature


- 1 Click **Start** on the Windows® taskbar, click **Control Panel, Performance and Maintenance**, and **System**. The **System Properties** window appears.
- 2 Select the **Hardware** tab, and click **Device Manager** in the **Device Manager** box. A window with a listing of the computer's hardware devices appears.
- 3 Double-click **DVD/CD-ROM drives**.
- 4 Double-click the listed drive name, and click the **Properties** tab.
- 5 Click to select the **Enable digital CD audio for this CD-ROM device** check box if it is not already selected.
- 6 Click **OK**.

To play an audio CD

- 1 Insert the disc into the optical drive. See “To insert a CD or DVD.”
- 2 Click to select an option in the **Audio CD** window.
- 3 Click **OK**.

To adjust the volume for playing CDs and DVDs


Some software programs have built-in volume controls, which you can adjust. If there are no volume controls, then you can adjust the volume of your computer’s built-in speakers by doing one of the following:

- Using the Function keys. An on-screen display appears notifying you when a change occurs.
 - To increase volume, press **Fn+F4**, then **↑** or **→**.
 - To decrease volume, press **Fn+F4**, then **↓** or **←**.
- Using the Volume icon.
 - 1 Double click the **Volume** icon  on the Windows® taskbar. The **Volume Control** dialog box appears.
 - 2 In the **Volume Control** and **AC Audio** columns, move the **Volume** sliders up to increase the volume and down to decrease the volume.

Copying files to a CD-RW or CD-R*

Before you write data to a CD-RW or CD-R, read the following notes to avoid a computer malfunction and ensure the best writing results:

- Deactivate the screen saver and exit anti-virus software.
- Deactivate memory-resident disc utilities to avoid data loss.
- Turn off the FindFast application if your computer has preinstalled Microsoft® Office applications, such as Excel, Word, and Outlook.
- Connect and use the AC adapter to power your computer.
- Use CD-Rs that are compatible with 8x speed.

 Your computer does not support 1x writing speed.

* For computer models equipped with a CD-RW/DVD Combo Drive.

- ❑ Insert the disc into the optical drive and use the preinstalled Sony SonicStage software.

For instructions on using SonicStage software

- 1 Click **Start** and then **Help and Support**.
- 2 Click **VAIO Multimedia Software**, and then **VAIO AV Applications**.
- 3 Click **SonicStage Software**.
- 4 Once you finish copying files to a CD-R that is readable in a CD-ROM drive, click **Finish** to complete the writing process before you eject the disc from the optical drive.



Do not strike or shake the computer while writing data to a disc.

Frequently asked questions

How do I maintain CDs and DVDs?

- ❑ Avoid touching the surface of the disc with your fingers. Fingerprints and dust on the surface of the disc may cause reading errors.
- ❑ To clean the disc, hold the edge of the disc, and use a soft cloth to wipe the surface from the center out. If the disc is badly soiled, moisten a soft cloth with water, wring it out well, and use it to wipe the surface of the disc from the center out. Wipe off any remaining moisture with a dry, soft cloth.
- ❑ Do not clean the disc with solvents (such as benzine, thinner, commercially available cleaners, or anti-static spray), which may damage the disc.
- ❑ Do not drop or bend the disc.

Why does my computer freeze when I try to read a disc?

The disc your computer is trying to read may be dirty or damaged. Restart the computer, and eject the disc from the optical drive. Examine the disc for dirt or damage. If the disc is dirty, see “How do I maintain CDs and DVDs?” for instructions on how to clean it.

Why did the computer (LCD) screen go blank?

- ❑ Your computer screen may go blank if the computer has lost power or is in a power saving mode (Standby or Hibernate).
 - ❑ Make sure the computer is plugged into a power source and is turned on. The power indicator on the computer will be on if the computer is on.
 - ❑ Make sure the battery is inserted properly and is charged.
 - ❑ If the computer is in LCD (Video) Standby mode, press any key to activate the computer screen.
- ❑ If the display mode is set to external display (such as TV), press and hold the **Fn** key while you press **F7** several times.

Why don't my changes appear on the computer (LCD) screen?

You may need to refresh the computer screen. Press the Windows key and press the **D** key twice.

Printer Connections

- Printing With Your Computer

Printing With Your Computer



You can connect a universal serial bus (USB) printer or a parallel port printer to your computer. To print properly, the printer you connect must be compatible with the Microsoft® Windows® operating system installed on your computer.

- Connecting a printer
- Disconnecting a printer
- Frequently asked questions

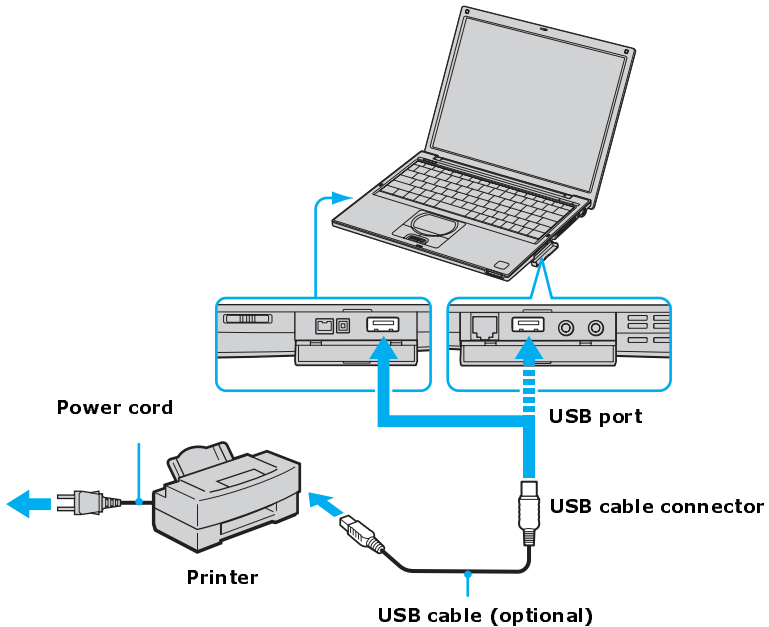
Connecting a printer

Your computer is compatible with many popular printers. In many cases, you can simply connect the printer to the computer and begin printing. Some printers require separate driver software installation. See the instructions that accompanied your printer for more information. If you cannot print once you have connected your computer to your printer, see “Frequently asked questions” in this section for more information.

To connect a USB printer

- 1** Locate a USB port  on the computer and the printer.
- 2** Plug the USB cable into the USB port  on your computer.
- 3** Plug the other end of the USB cable into the USB port on the printer.

Connecting a USB Printer Cable




 See the manual that came with the USB printer for more information on its installation and use.

Disconnecting a printer

If your computer is turned off, simply unplug the printer cable from your computer's USB port.

To disconnect a printer while the computer is powered on

- 1 Double-click the **Safely Remove Hardware** icon  on the taskbar. The **Safely Remove Hardware** window appears.
- 2 Select the printer on the **Hardware devices** window, if it is not already selected, and click **Stop**. The **Stop a Hardware device** window appears.

- 3 Make sure the correct printer is selected, and click **OK**. A message appears stating it is now safe to remove the hardware device.
- 4 Unplug the printer cable from your computer's USB port.

Frequently asked questions

Why can't I print a document?

- Make sure the printer is turned on, and the printer cable is securely connected to the ports on your printer and computer.
- Make sure the printer is compatible with the Microsoft® Windows® operating system installed on your computer.
- You may need to install the printer software drivers before you use the printer. See the instructions that came with your printer for information about installing these drivers.
- If the printer is not functioning after the computer resumes from a power saving mode (Standby or Hibernate), reset the printer connection.
 - 1 Click **Start**, and click **Control Panel**.
 - 2 Click **Printers and Other Hardware**, and click **Printers and Faxes**.
 - 3 Right-click the printer icon that is not functioning, and select **Properties** to open the **Properties** window.
 - 4 Click **OK**.

Computer Features

- ❑ Using the Keyboard

- ❑ Using the Touchpad
- ❑ Using the Jog Dial Control
- ❑ Using Memory Stick Media
- ❑ Using the Multilingual User Interface Language Option
- ❑ Changing the window design of Sony software

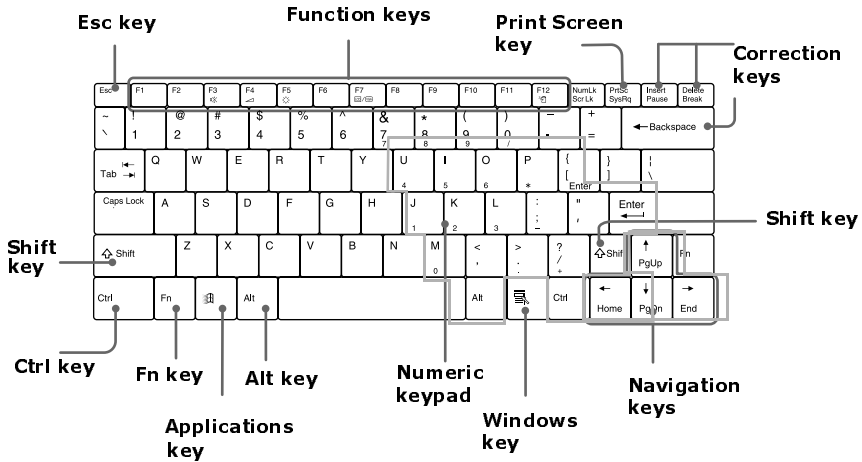
Using the Keyboard

Your keyboard is very similar to a typewriter's, but your computer keyboard has additional keys that perform specific computer-related tasks.



- ❑ Key locations and descriptions
- ❑ Combinations and functions with the Windows key
- ❑ Indicators
- ❑ Combinations and functions with the Fn key

Key locations and descriptions








Keyboard






Key	Description
Numeric keypad	Contains the keys found on a typical calculator. Use the numeric keypad area to type numbers or to perform mathematical calculations such as addition and subtraction. Numbers appear on the front beveled edge of the numeric keys. Press the Num Lock key to activate the numeric keypad. (When you do so, the Num Lock indicator lights up.) Press the Num Lock key again to deactivate the numeric keypad.
Arrow keys	The Left, Right, Up, and Down arrow keys move the pointer on the screen and also function as the Home, End, Page Up, and Page Down keys, respectively.
Correction keys	The Insert, Back Space, and Delete keys enable you to make corrections in your documents.
Function keys	The 12 function keys along the top of the keyboard are used to perform designated tasks. For example, in many applications, F1 is the Help key. The task associated with each function key may vary from one application to the next.
Escape key	The Esc (Escape) key is used to cancel commands.
Print Screen key	The Print Screen key takes an electronic snapshot of the screen and moves it to the Clipboard. You can then paste the screen shot into a document and print it.
Operator keys (Shift, Ctrl, Alt keys)	Several keys are always used with at least one other key: Ctrl, Alt, and Shift. When held down with another key, the Ctrl (Control) and Alt (Alternate) keys offer another way to give commands. For example, in many applications, instead of choosing the Save command from a menu, you can hold down Ctrl and press S (referred to as Ctrl+S). The Shift key operates the same way as on a typewriter; it is used to produce capital letters or special symbols such as @ and \$.






Key	Description
Windows key 	The key with the Windows® operating system logo displays the Start menu; it is the equivalent of clicking Start on the taskbar. See “Combinations and functions with the Windows key” for more information.
Fn key	The Fn key is used in combination with other keys to issue commands. See “Combinations and functions with the Fn key” for more information.
Applications key 	The Applications key displays a shortcut menu of context-sensitive choices. Pressing this key is the equivalent of clicking the right mouse button.



Combinations and functions with the Windows key

Combination	Function
 + F1	Displays VAIO Help and Support Center window.
 + Tab	Switches the selected button on the taskbar.
 + D	Displays the desktop.
 + E	Displays My Computer window.
 + F	Displays the Search Results window, where you can find a file or folder. This is the equivalent of selecting Search from the Start menu.
 + Ctrl + F	Displays the Search Results - Computers window, where you can locate other computers. This is the equivalent of selecting Search, and then Computer from the Start menu.
 + M	Minimizes all displayed windows.


Combination	Function
Shift +  + M	Returns all minimized windows to their previous size.
 + R	Displays the Run window. This is the equivalent of selecting Run from the Start menu.
Fn +  + Insert	Displays the System Properties window. This is the equivalent of selecting Control Panel, and then System from the Start menu.




Indicators

Indicator	Function
Power 	Lights up when the power to the computer is turned on, flashes in Standby mode, and turns off when the computer is in Hibernate mode or powered off.
Battery 	Lights up when the computer is using battery power, flashes when the battery is running out of power, double-flashes when the battery is charging.
Memory Stick® 	Lights up when data is read from or written to the Memory Stick media. (Do not enter Standby mode or turn off the computer when this indicator light is on.) When the indicator is off, the Memory Stick media is not being accessed.
Hard disk 	Lights up when data is read from or written to the hard disk drive. Do not enter Standby mode or turn off the computer when this indicator light is on.
Num Lock 	Lights up when the number keys area in the numeric keypad are active. When the indicator is off, the alphanumeric character keys in the keypad area are active.



Indicator	Function
Caps Lock 	Lights up when the letters appear in uppercase as you type. The Shift key lowers the case of typed letters when Caps Lock is on. When the indicator is off, the letters appear in lower case as you type (unless you hold down the Shift key).
Scroll Lock 	Lights up when the screen scrolls differently. (Exactly how it scrolls depends on the specific application. This function does not work with all applications.) When the indicator is off, information moves across the display normally.
Wireless LAN	Lights up when the Wireless LAN function is running.

Combinations and functions with the Fn key

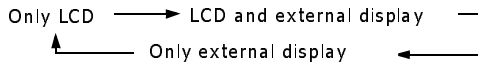
 If you switch user identities during a computing session, the Fn+F7 key functionality (if available on your computer) will be interrupted. To switch to an external display or monitor, see “Selecting a Display Mode” for more information.

Combinations/ Feature	Function
Fn+  (F3) Mute On/Off	Toggles the built-in speaker off and on.
Fn+  (F4) Speaker volume	Adjusts the built-in speaker volume. An on-screen display appears notifying you when a change occurs. To increase volume, press Fn+F4 , then ↑ or → . To decrease volume, press Fn+F4 , then ↓ or ← .
Fn+  (F5) Brightness control	Adjusts the brightness of the LCD. To increase light intensity, press Fn+F5 and then ↑ or → . To decrease light intensity, press Fn+F5 and then ↓ or ← .



**Combinations/
Feature****Function**

Fn+  / 
(F7)
Switch to the
external
monitor/LCD

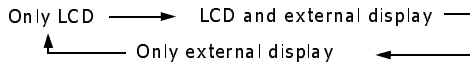
Toggles between the LCD, a connected external display, and both the LCD and external display.




Select one display at a time to playback DVDs. Connect the cable before you turn on the computer, otherwise **Fn+F7** will not work.

Fn+  only/
 (F8)
Control AV out

Toggles between LCD-only, external-only, and dual LCD/TV display modes.



Select one display at a time to playback DVDs. Connect the cable before you turn on the computer, otherwise **Fn+F8** will not work. You cannot use the **Fn+F8** function to switch between LCD and TV once a DVD is inserted into the optical drive.

Fn+  (F12)
Hibernate

Provides for the lowest level of power consumption.

When you run this command, the state of the system and state of the peripheral devices are written to the hard disk and the system power is turned off. To return the system to its original state, use the power button to turn on power.

Fn + Esc
Standby


Puts the system into Standby mode, a power management state. To return the system to the active state, press any key or press the power button.

Fn + E

Ejects the CD.

Fn+B
Bass Boost

Toggles the bass-boost function off and on. This feature is available only while using headphones.

 You can also carry out these functions using the Jog Dial® Control. Some functions are not available until the Windows® operating system launches.

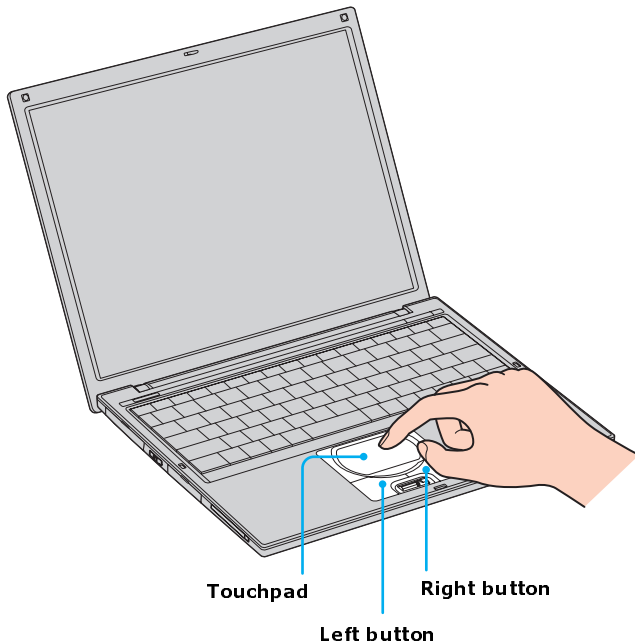
Using the Touchpad

The keyboard contains a pointing device called a touchpad. You can point to, select, drag, and scroll objects on the screen using the built-in touchpad.

- ❑ Describing touchpad actions
- ❑ Customizing the touchpad
- ❑ Frequently asked questions

Describing touchpad actions

Touchpad



Action	Description
Point	Slide one finger on the touchpad to place the pointer on an item or object.
Click	Press the left button once.
Double-click	Press the left button twice.
Right-click	Press the right button once. In many applications, this action displays a shortcut menu of context-sensitive choices.
Drag	Slide one finger while pressing the left button.
Scroll	Move your finger along the right edge of the touchpad to scroll vertically. Move your finger along the bottom to scroll horizontally. (The scroll function is available only with programs that support a touchpad scroll feature.)






Customizing the touchpad

Sony Notebook Setup lets you customize your touchpad, such as enable or disable the touchpad. You can also open the Mouse Properties dialog box, which enables you to set your touchpad and mouse preferences, such as changing pointers, enabling or disabling the tapping feature, clicking both buttons simultaneously, and adjusting the touchpad speed.


To disable the touchpad

- 1 Click **Start** on the Windows® taskbar, and point to **All Programs**.
- 2 Point to **Sony Notebook Setup**, and click **Sony Notebook Setup** in the submenu. The **Sony Notebook Setup** dialog box appears.
- 3 Click the **Touchpad** tab, and select **Disable Touchpad**.
- 4 Click **Apply**.
- 5 Press **Enter** to close the window.

To enable the touchpad




- 1 Press the **Windows** key . The **Start** menu appears.
- 2 Press the **Up Arrow** key  to select **All Programs**, and press **Enter**.
- 3 Press the **Up Arrow** key  to select **Sony Notebook Setup**, and press **Enter**. A submenu appears with **Sony Notebook Setup** preselected.
- 4 Press **Enter**. The **Sony Notebook Setup** dialog box appears.
- 5 Press the **Right Arrow** key  to select the **Touchpad** tab.
- 6 Press the **Tab** key to select the **Default** button, and press **Enter**. A pop-up window appears.
- 7 Press the **Left Arrow** key  to select **OK**, and press **Enter**. The **Enable Touchpad** option is automatically selected.
- 8 Press the **Tab** key to select the **Apply** button, and press **Enter**.
- 9 Click **OK**.

To open the Mouse Properties dialog box

- Right-click the **Touchpad** icon  on the Windows® taskbar, and click **Mouse Properties** from the shortcut menu. The **Mouse Properties** dialog box appears.


Frequently asked questions

Why doesn't the touchpad work?

- You may have disabled the touchpad without connecting a mouse to the computer. See “To enable the touchpad.”
- Restart the computer to activate the touchpad again.
- If your touchpad is interpreting a single tap as a double-click, adjust the button assignments. Follow these steps:
 - 1 Press the **Windows** key . The **Start** menu appears.
 - 2 Press the **Up Arrow** key  to select **All Programs**, and press **Enter**.
 - 3 Press the **Up Arrow** key  to select **Sony Notebook Setup**, and press **Enter**. A submenu appears with **Sony Notebook Setup** preselected.

- 4 Press **Enter**. The **Sony Notebook Setup** dialog box appears.
 - 5 Press the **Right Arrow** key **→** to select the **Touchpad** tab, and press **Alt+S** simultaneously. The **Mouse Properties** dialog box appears.
 - 6 Make sure the **Buttons** tab is open, and press the **Up** **↑** and **Down Arrow** **↓** keys to change the button assignments. Press the **Tab** key to move between drop-down menus.
 - 7 Press **Enter** to save your changes and close the dialog box.
- ❑ If you are still experiencing problems, make sure another mouse was not installed.
 - ❑ You may need to use your Application Recovery CD(s) to reinstall the mouse drivers. See “Using the Application Recovery CD(s)” for more information.

Why doesn't the pointer move when I use the touchpad?

- ❑ Try restarting your computer. Follow these steps:
 - 1 Press the **Windows** key .
 - 2 Press **U**. The **Turn off computer** window opens.
 - 3 Press **R** to restart the computer.
- ❑ If the computer does not restart,
 - 1 Press **Ctrl+Alt+Delete** simultaneously. The **Windows Task Manager** window appears.
 - 2 Press **Alt** to highlight the menu bar, and press the **Right Arrow** **→** key to select **Shut Down**.
 - 3 Press **Enter**.
 - 4 Press **R** to restart the computer.
- ❑ If you still cannot restart your computer, press and hold the power button for more than four seconds to turn off the computer.
- ❑ If the pointer does not move while playing a disc, press **Ctrl+Alt+Delete** simultaneously to stop playback and restart the computer.
- ❑ You may need to use your supplied Application Recovery CD(s) to reinstall the touchpad or mouse drivers. See “Using the Application Recovery CD(s)” for more information.

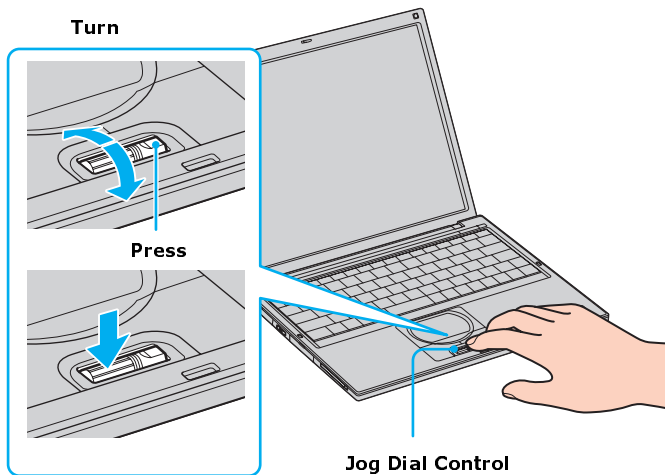
Using the Jog Dial Control

Your computer is equipped with a Jog Dial™ Control and Jog Dial Navigator software, which enables you to scroll through programs, folders, and documents from a predefined list. The Jog Dial Control and Jog Dial Navigator are compatible with preinstalled software programs that support Jog Dial Navigator functions.*

- ❑ Using the Jog Dial Control
- ❑ Using the Indicate Window
- ❑ Using Jog Dial Launcher
- ❑ Using Application and Scroll modes
- ❑ Changing Jog Dial Navigator settings

Using the Jog Dial Control


Locating and Using the Jog Dial Control





* Some software programs do not support Jog Dial Navigator.


To use the Jog Dial Control

- ❑ Turn the Jog Dial™ Control to scroll up and down a menu.
- ❑ Press the Jog Dial Control to select a menu item.
- ❑ Press the Back button (on selected models) to return to the previous menu.


 If your computer does not come with a Back button, you can select Return on the Jog Dial Launcher to go back to the previous menu.

Using the Jog Dial Navigator icon

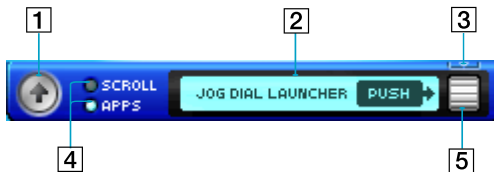
The Jog Dial™ Navigator icon  appears on the taskbar when you turn on your computer. A second Jog Dial Navigator icon  appears on the Indicate Window, when it is displayed. The arrows on the Jog Dial Navigator icon on the taskbar change to show the direction in which you are turning the Jog Dial™ Control. No arrows appear on the taskbar icon if the Application mode is selected, and the Jog Dial Control is not in use.

For more information about Jog Dial Navigator, right-click the Jog Dial Navigator icon  on the taskbar, and click Help.

Using the Indicate Window


The Indicate Window appears as a floating window on your desktop when you use the Jog Dial™ Control or when you double-click the Jog Dial Navigator icon  on your taskbar.


Indicate Window



	Features	Function
1	Launcher button	Opens the Jog Dial Launcher.
2	LCD area	Shows program information, depending on the mode and software.
3	Close button	Closes the Indicate Window.
4	Mode buttons	Shows the current mode, Application or Scroll.
5	Jog Dial Navigator icon	Displays Jog Dial Navigator operations.

To move, hide, or close the Indicate Window

- Click and drag the Indicate Window to another location on the desktop.
- Click the Close button, and then click **OK**.
- Right-click the Indicate Window, and select **Hide Indicate Window** from the drop-down menu. To make the Indicate Window reappear, right-click the **Jog Dial Navigator** icon  on the taskbar, and select **Display Indicate Window**.
- Right-click the taskbar, select **Toolbars** from the pop-up menu, and click **Jog Dial** to store the Indicate Window on the taskbar. To make the Indicate Window reappear on the desktop, right-click the taskbar, select **Toolbars** from the menu, and click **Jog Dial** to clear the selection.

 If the Indicate Window is hidden behind the taskbar icons, right-click the taskbar and click **Lock the Taskbar** to clear the selection. Click and drag the edge of the Indicate Window to the left until it is in clear view.



Using Jog Dial Launcher

Jog Dial Launcher lists a menu of programs installed on your computer. You can use the Jog Dial™ Control to scroll and open these menu items.

Jog Dial Launcher




To open Jog Dial Launcher

- ❑ If **APPS** is selected on the Indicate Window, click the **Jog Dial Navigator** icon  on the Indicate Window or press the Jog Dial Control.
- ❑ If **Scroll** is selected on the Indicate Window, click the Launcher button .

To open a menu item

- 1 Open Jog Dial Launcher. See “To open Jog Dial Launcher.”
- 2 Turn the Jog Dial Control until the menu item you want to select appears between the two center arrows.
- 3 Press the Jog Dial Control.
- 4 Repeat steps 2 and 3 as necessary to open a program.

 If your computer does not come with a Back button, you can select **Return** on the Jog Dial Launcher to go back to the previous menu.

Using Application and Scroll modes

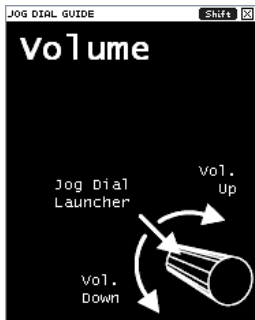
Jog Dial Navigator operates in one of two modes: Scroll or Application. Once an application is open, you can easily switch modes.

Mode	Description
Application	Enables you to navigate through a menu of programs installed on your computer.
Scroll	Enables you to scroll through an active window with a scroll option.

To select Application mode

- ❑ Click **APPS** on the Indicate Window. When you select Application mode, the Jog Dial Guide or Jog Dial Navigator window appears, depending on the program.

Jog Dial Guide



Jog Dial Navigator



Windows	Descriptions
Jog Dial Guide	Appears when a program that supports Jog Dial Navigator has audio features, such as volume control.
Jog Dial Navigator	Appears when a program that supports Jog Dial Navigator is active.

When using a program that has audio features, you can switch Application mode windows by pressing the Jog Dial Control and holding it until the window changes.

To select Scroll mode

- ❑ No windows appear when you select the Scroll mode. Simply turn the Jog Dial Control and the active window will scroll up and down or side to side if it has a scroll option.

To switch modes

- ❑ Click **SCROLL** on the Indicate Window.
- ❑ On the Application mode window, select **SCROLL MODE** and push the Jog Dial Control.

Selecting Scroll Mode from Application Mode




Changing Jog Dial Navigator settings

You can change the Jog Dial Navigator settings to modify the Jog Dial Navigator functionality and appearance.

To change settings

- 1 Right-click the Jog Dial Navigator icon  on the taskbar. A pop-up menu appears.
- 2 Select **Jog Dial Setting**. The **Jog Dial Setting** window appears.
- 3 Make your changes, and click **OK**.

For information about Jog Dial settings, right-click the **Jog Dial Navigator** icon  on the taskbar, and click **Help**.


Using Memory Stick Media

This compact, portable, and versatile recording medium has a data capacity exceeding that of a floppy disk. The medium is specially designed for exchanging and sharing digital data with compatible products. Because it is removable, the media can be used for external data storage.

- Selecting Memory Stick media
- Inserting Memory Stick media
- Viewing the contents
- Write-protecting Memory Stick media
- Formatting Memory Stick media
- Removing Memory Stick media
- Frequently asked questions

Selecting Memory Stick media

The following two types of Memory Stick media can be used with your computer:


- MagicGate™ Memory Stick media (hereafter called MG Memory Stick media), which is provided with copyright protection
- Memory Stick  Memory Stick media, which does not have the same copyright protection as MagicGate Memory Stick media

Some music files with secure copyright protection may be stored on MG Memory Stick media but not on regular Memory Stick media. You can also use MagicGate media-compatible devices to record and playback music when they are connected to your computer.

You can store mixed data on the Memory Stick media. For example, you can copy an ordinary file on a MG Memory Stick media that already contains music.

What is MagicGate Memory Stick media?

MagicGate Memory Stick media provides copyright protection that consists of authentication and encryption technology. Authentication technology ensures that protected content is only transferred between compliant devices and media. Protected content is recorded and transferred in an encrypted format to prevent unauthorized duplication or playback.


 MG Memory Stick media has the MG mark.

Inserting Memory Stick media

Before using Memory Stick media, back up important data. The media slot accommodates only one Memory Stick media at a time.

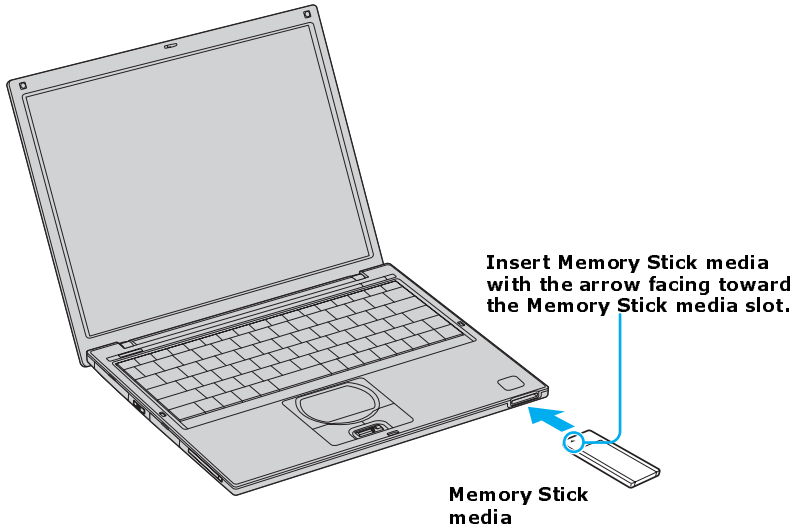
To insert Memory Stick media

- 1 Insert the Memory Stick media with the arrow facing up and toward the Memory Stick media slot.

 Inserting the media in the wrong direction may damage the connector pins.

- 2 Carefully slide the Memory Stick media into the slot until it clicks in place. The Memory Stick media indicator light briefly flashes.

Inserting Memory Stick media



Viewing the contents

Depending on the model you purchased, the Sony Memory Stick window appears automatically when you insert a Memory Stick media. From this window, you can choose to view, print, copy or organize your Memory Stick images or data. If the Sony Memory Stick window does not appear when you insert your Memory Stick media, then follow these steps.

To view the contents

- 1 From the **Start** menu, click **My Computer**. The **My Computer** window appears.
- 2 Click **Sony MemoryStick**. The **Sony MemoryStick** window appears, displaying the contents stored on the Memory Stick media.

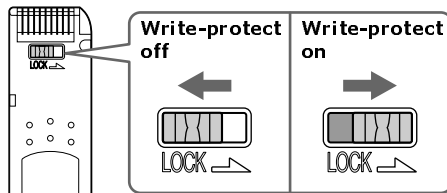
Write-protecting Memory Stick media

Memory Stick® media is designed with a write-protect tab to protect data from accidental erasure or overwriting. Move the tab to the right or left to set or release write-protection. When the write-protect tab of the Memory Stick media is set to LOCK, data cannot be recorded or erased.

Write-protect off Data can be saved on the Memory Stick media.

Write-protect on Data can be read from but not saved on the Memory Stick media.

Using the Write-protect tab



(Back of Memory Stick Media)

Formatting Memory Stick media

Memory Stick® media is formatted for immediate use when you purchase it. If you need to reformat Memory Stick media, use the Memory Stick Formatter that is provided with the media. For more information about using Memory Stick Formatter, refer to Formatter Help.



Formatting Memory Stick media erases all data, including music data, previously saved to it. Before you reformat Memory Stick media, confirm that the media does not contain files you want to keep and back up important data.

To format Memory Stick media


- 1 Insert the Memory Stick media into the Memory Stick media slot. See “To insert Memory Stick media” for more information.
- 2 From the **Start** menu, click **My Computer**. The **My Computer** window appears.
- 3 Right-click **Sony MemoryStick**, and click **Format** from the menu. The **Format Sony MemoryStick** dialog box appears.
- 4 Select **Quick Format** in the **Format options** box, and then click **Start**.

Removing Memory Stick media

If the media is removed prematurely, a blue screen with an error message appears, prompting you to continue or exit. Reinsert the media into the slot and press **Enter** to continue. This enables the media to finish reading or writing data.

To remove Memory Stick media

- 1 Wait a minimum of 10 seconds after the Memory Stick media finishes reading or writing data before removing the media.
- 2 Make sure the access light is off.
- 3 Push the Memory Stick media in toward the computer.
- 4 When the Memory Stick media ejects, pull it out.

 Be careful when removing the Memory Stick media, as it may eject completely from the slot.

Frequently asked questions

Why can't I open my image files?

Copy the data from the Memory Stick media onto your computer's hard disk drive, and then format the Memory Stick media using Memory Stick Formatter software preinstalled on your computer.

Why can't I save music files onto my Memory Stick media?

- Only MagicGate Memory Stick media can be used with copyright protected data such as music.
- Copyright protected music cannot be checked-out to any Memory Stick media other than MG Memory Stick media.
- Recorded music is limited to private use only. Using recorded music for any other purpose requires permission of the copyright holders.
- Sony is not responsible for music files that cannot be recorded from a CD or downloaded from other sources.

Can I copy images from a digital video camera using Memory Stick media

Yes, and you can view video clips that you have recorded with Memory Stick media-compatible video camera recorders.

How do I prevent damage to the Memory Stick media?


- Do not use the media in locations that are subject to static electricity or electrical noise.
- Do not touch the media connector with your finger or metallic objects.
- Do not attach labels other than the supplied label to a media.
- Do not bend, drop, or apply strong shock to the media.
- Do not disassemble or modify the media.
- Do not allow the media to get wet.

How do I extend the life of the Memory Stick media?

- ❑ Use the supplied storage case. See the instructions that came with your media for more information on its use.
- ❑ Do not use or store the media in a location that is subject to:
 - ❑ Extremely high temperatures, such as in a car parked in the sun
 - ❑ Direct sunlight
 - ❑ High humidity or places with corrosive substances


Using the Multilingual User Interface Language Option

(Windows® XP Pro only) After you have initially setup your new VAIO® computer, you can change the language displayed in Microsoft® Windows® XP Professional operating system. The multilingual user interface (MUI) language option changes the text controlled by Windows XP Professional operating system. Menus, help files, and icons generated by Windows XP Professional are shown in your selected language. All other software applications are displayed in English as the default language.

 The multilingual user interface language option is not designed to replace a localized version of the Microsoft Windows XP Professional operating system. Under certain conditions, some third-party software applications may not function properly.

To Change the Language Option

- 1 Click **Start** in the Windows® taskbar, then click **Control Panel**.
- 2 Click **Date, Time, Language and Regional Options**, then click **Regional and Language Options**. The **Regional and Language Options** dialog box appears.
- 3 Click the **Languages** tab.
- 4 From the **Language used in menus and dialogs** drop-down menu, select the desired language:
 - English
 - français
 - Português
 - español
- 5 Click **Apply**, and then click **OK**.
- 6 The **Change Regional Options** pop-up window appears. Click **OK**.
- 7 Click **Start** in the Windows® taskbar, then click **Logoff**. Restart your computer.

 Additional users can also change to their desired language(s) without effecting your existing language settings.

Changing Numbers, Currency, Time, and Date Formats

You can change your operating system's number, currency, time and date formats to coordinate with your chosen country or language settings.

To change these formats

- 1 Click **Start** in the Windows taskbar, then click **Control Panel**.
- 2 Click **Date, Time, Language and Regional Options**, and then click **Regional and Language Options**. The **Regional and Language Options** dialog box appears.
- 3 From the **Regional Options** tab, click the **Standards and formats** drop-down menu to view the available country choices. Select the desired country.
- 4 Click **Customize** to change the number, currency, time, and date settings.
- 5 Click **Apply**, and then **OK**.

Changing the window design of Sony software

This feature is available with UI Design Selector-compatible software only.


To change the window design

- 1** Click **Start**, and then **Control Panel**.
- 2** In the left panel, click **Switch to Classic View**.
- 3** Double-click **UI Design Selector**.
- 4** Click << or >> and select a design.
- 5** Click **Apply**. The **UI Design Selector** window design changes. The window design for your Sony software will match the **UI Design Selector** window.
- 6** Click **OK**.

Audio and Video Connections

- ❑ Using i.LINK Digital-Video Recorders
- ❑ Using Computer Monitors and Projectors
- ❑ Using Speakers
- ❑ Using Microphones

Using i.LINK Digital-Video Recorders



You can connect an i.LINK®* digital-video (DV) recorder, such as an i.LINK digital video camera recorder, to the i.LINK® S400  (IEEE 1394) port on your computer, port replicator, or docking station. The i.LINK digital video camera recorder is an external device that allows you to record images digitally.

- Connecting an i.LINK digital video recorder
- Disconnecting the i.LINK digital video recorder
- Using a digital video camera recorder
- Notes on connecting an i.LINK device
- Frequently asked questions

Connecting an i.LINK digital video recorder

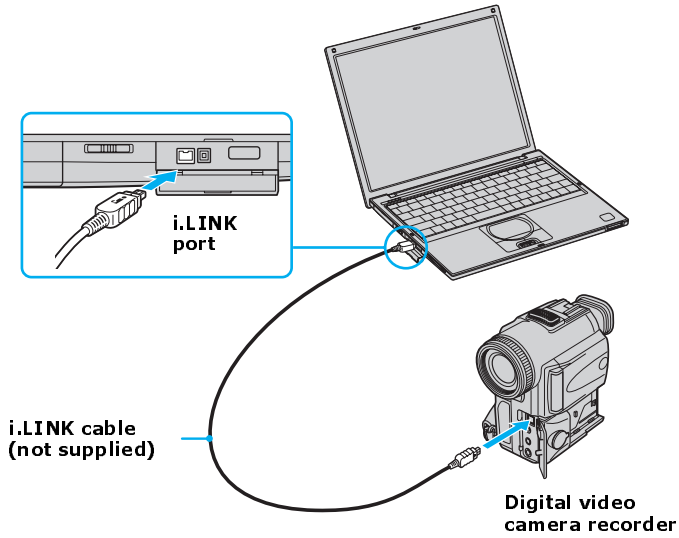
You can connect an i.LINK digital video (DV) recorder when the computer is powered on or off. Connecting the DV recorder when the computer is in a power saving mode (Standby or Hibernate) may cause the computer to malfunction.


To connect an i.LINK digital video recorder

- 1 Turn on the DV device and the computer.
- 2 Plug the i.LINK® cable into the i.LINK  / DC In/Out port on the DV device.
- 3 Plug the other end of the i.LINK cable into the i.LINK port  on your computer, port replicator, or docking station. The **Found New Hardware** window appears on the lower right corner of your screen.

* i.LINK is a trademark of Sony used to designate that a product contains an IEEE 1394 connector. The i.LINK connection may vary, depending on the software application, operating system, and compatible i.LINK devices. All products with an i.LINK connection may not communicate with each other. Refer to the documentation that came with your compatible i.LINK device for more information on operating conditions and proper connection. Before connecting compatible i.LINK PC peripherals to your system, such as a CD-RW or hard disk drive, confirm their operating system compatibility and required operating conditions.

Connecting an i.LINK Digital Video Camera Recorder




 See the manual that came with your digital video camera recorder for more information on its installation and use.



Disconnecting the i.LINK digital video recorder

You can disconnect the i.LINK digital video recorder when the computer is powered on or off. Disconnecting the DV device when the computer is in a power saving mode (Standby or Hibernate) may cause the computer to malfunction.

To disconnect the i.LINK DV recorder when the computer is off

- 1 Turn off the computer and the i.LINK DV device.
- 2 Unplug the i.LINK cable from the  i.LINK / DC In/Out port on the computer.

To disconnect the i.LINK digital video recorder when the computer is on

- 1 Double-click **Safely Remove Hardware** icon  on the taskbar. The **Safely Remove Hardware** window appears.
- 2 Select the i.LINK DV recorder in the **Hardware devices** window if it is not already selected, and click **Stop**. The **Stop a Hardware device** window appears.
- 3 Make sure the i.LINK DV recorder is selected, and click **OK**. A message appears stating it is now safe to remove the hardware device.
- 4 Unplug the i.LINK cable from the  i.LINK / DC In/Out port on the computer.

Using a digital video camera recorder

Your computer comes with preinstalled driver software that is compatible with most Sony digital video camera recorders. If you purchased a camera that comes with its own driver software, install these drivers before you use the camera.

To view images

You can view the images captured by your digital video camera recorder three different ways. Select one set of instructions from the following list:

- If your digital video camera recorder is compatible with the preinstalled software, the **Digital Video Device** window appears when you connect the camera to the computer. Select the program you want to use in this window, and click **OK**.
- Click **Start**, and click **All Programs**. Select a software program in which to view your images.
- Click **Start**, and click **Experience VAIO**. Click **Movies**, and select a program in which to view your images.

Notes on connecting an i.LINK device

- Do not connect more than one digital video camera recorder at a time. The software supplied with your computer will not recognize multiple cameras.
- Do not connect an external device that requires power from the i.LINK port. The i.LINK port cannot supply power to the external device.

- ❑ The computer supports transfer rates up to 400 Mbps; however, the actual transfer rate is the lowest transfer rate of the external device.
- ❑ The i.LINK features available may vary depending on the software applications you use. See the documentation that accompanied your software for more information.

Frequently asked questions

Why can't I use the DV recorder?

You may not be able to use the DV recorder and the message, **DV equipment seems to be disconnected or turned off** may appear for the following reasons:

- ❑ The DV recorder was not connected properly. See “Using Computer Monitors and Projectors” for more information.
- ❑ The i.LINK cable connectors are not plugged securely into the ports on the computer and the camera. Unplug the connectors, and plug them in again.
- ❑ Multiple i.LINK®* devices are connected to the computer. The software supplied with your computer will not recognize multiple i.LINK devices. Turn off your computer and all connected devices. Disconnect the devices that are not in use. See “Using Computer Monitors and Projectors” for instructions on reconnecting the i.LINK device.

* i.LINK is a trademark of Sony used only to designate that a product contains an IEEE 1394 connection. The i.LINK connection may vary, depending on the software applications, operating system, and compatible i.LINK devices. All products with an i.LINK connection may not communicate with each other. Refer to the documentation that came with your compatible i.LINK device for information on operating conditions and proper connection. Before connecting compatible i.LINK PC peripherals to your system, such as CD-RW or hard disk drive, confirm their operating system compatibility and required operating conditions.

Using Computer Monitors and Projectors


You can connect an external display (such as a computer monitor or a projector) to your computer.

- Connecting a computer monitor
- Connecting a projector
- Selecting a Display Mode
- Disconnecting a computer monitor or projector

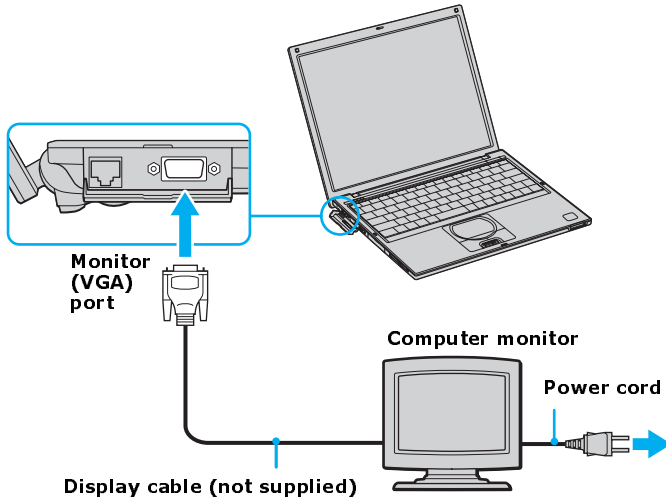
Connecting a computer monitor

You can display the images on your computer's LCD screen onto an external computer monitor. The external monitor displays the operations you perform on your computer.

To connect a computer monitor

- 1 Make sure the computer monitor is plugged into an AC outlet.
- 2 Turn off the computer.
- 3 Plug the display cable connector into the Monitor (VGA) port  on the computer.
- 4 Turn on the computer monitor (if it is not already on), and then turn on the computer.
- 5 Press the **Fn+F7** key combination to toggle the display between your computer and the monitor. See “Selecting a Display Mode” for more information.



Connecting a Computer Monitor



Connecting a projector

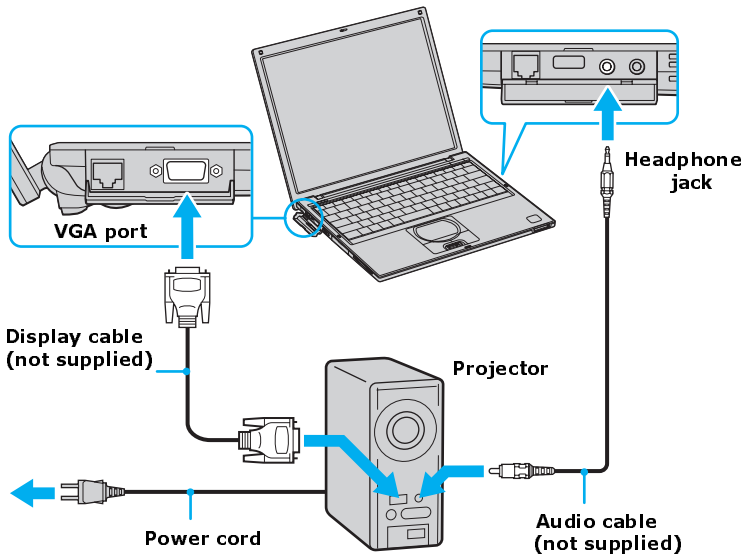
You can use a projector to display the actions and images on your computer's LCD screen.

To connect a projector

- 1 Plug the projector into an AC outlet.
- 2 Turn off the computer.
- 3 Plug the display cable connector into the Monitor (VGA) port  on the computer.
- 4 Plug the other end of the display cable into the projector.
- 5 Plug the audio cable connector into the Headphone jack  on the computer.
- 6 Plug the other end of the audio cable into the projector.
- 7 Turn on the projector (if it is not already on), and then turn on the computer.

- Press the **Fn+F7** key combination to toggle the display between your computer and the projector. See “Selecting a Display Mode” for more information.

Connecting a Projector





 See the manual that came with your projector for more information on its installation and use.

Selecting a Display Mode

This computer uses the Intel video controller. When you connect your computer to an external display, you can switch the display mode between your computer's LCD display and the external display, using shortcut keys or the Display Properties settings.

Shortcut keys **Result**

Fn+  / 
(F7)

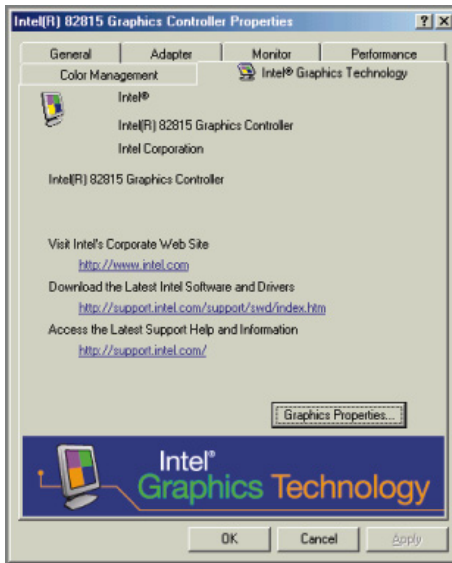
Toggles between the LCD, a connected external display (projector or computer monitor), and both the LCD and external display.

Select one display at a time. Connect the cable before you turn on the computer, otherwise **Fn+F7** will not work.


To switch the display mode using the Display Properties settings

- 1 Right-click the desktop, and click **Properties** from the drop-down list. The **Display Properties** dialog box appears.
- 2 Click the **Settings** tab, and then click **Advanced**. The **Intel Graphics Controller Properties Screen** dialog box appears.

Intel Graphics Controller Properties screen



- 3 Select the **Intel® Graphics Technology** tab, and click the **Graphic Properties** button.
- 4 Click the Device tab and select the type of display.

 You may not be able to display the notebook LCD screen and an external display or projector at the same time, depending on the types of computer displays and projectors you are using.

Turn on the notebook after you connect the external display.

Disconnecting a computer monitor or projector

You can disconnect the external computer monitor or projector by unplugging the display or Monitor (VGA) cable from your computer's port. Disconnecting the external display when the computer is in a power saving mode (Standby or Hibernate) may cause the computer to malfunction.

Using Speakers

Your computer comes with built-in stereo speakers. If you wish to enhance the sound quality of your computer, you can purchase and connect external speakers. If you want to purchase speakers, make sure the speakers are designed for computer use. You can shop Sony online at <http://www.sonymstyle.com/vaio> or contact your local retailer.

- Connecting speakers
- Disconnecting external speakers
- Adjusting the volume
- Enabling the audio feature
- Frequently asked questions


Connecting speakers

You can connect speakers to your computer to enhance the sound quality of your computer.

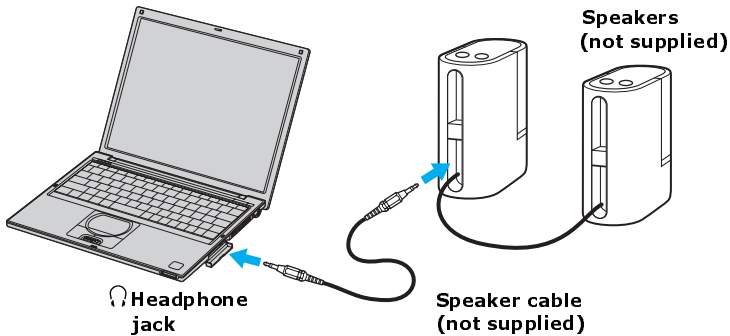


Do not place floppy disks on the speakers. The speakers' magnetic field may damage the data stored on the floppy disks.

To connect speakers to your computer


- 1** Turn down the volume of the speakers.
- 2** Plug the speaker cable into the Headphone jack  on the computer.
- 3** Plug the other end of the speaker cable into the speaker.

Connecting External Speakers




 See the manual that came with your speakers for more information on their installation and use.

Disconnecting external speakers


You can disconnect external speakers when the computer is on or off. Simply unplug the speaker cable from the Headphone jack  on the computer.

Adjusting the volume

To adjust the volume for playing CDs and DVDs, use the **Volume** icon  on the Windows® taskbar or the volume dial control. Adjusting the volume for playing CDs or DVDs does not adjust the volume for recording CDs or DVDs.

 You can only adjust the recording volume in the **Recording Control** window. See “Using Microphones” for instructions on how to open this window.




To adjust the volume of your speakers

- 1 Right-click the **Volume** icon  on the Windows® taskbar, and select **Open Volume Control**. The **Volume Control** window appears.
- 2 Click and drag the **Volume Control** slider up to increase volume and down to decrease volume.

- 3 Click to cancel any **Mute** check boxes that are selected.

Sound device	Function
Volume Control	Adjust the sound level from the speakers or headphones.
Wave	Adjust the wavfile sound or the system sound of Windows.
SW Synth	Adjusts the internal or external synthesizer volume.
CD Audio	Adjust the volume of the CD in the optional optical drive.
Microphone	Adjust the internal or external microphone volume.
Telephony	Adjust the modem or telephone volume.
PC Beep	Adjust the beep sound when inserting or removing the PC Card and other devices.
Line*	Adjusts the sensitivity of volume input.

* On selected models only.

 As a short-cut, you can use the Fn+F4 key combination and the arrow keys  or  to change the volume setting. You can also use the Fn+F3 key combination to toggle the mute option on and off.

Enabling the audio feature

If you do not hear sound when playing a CD or DVD, you may need to enable the audio feature.

To enable the audio feature

- 1 Click **Start** on the Windows® taskbar, and click **Control Panel**.
- 2 Click **Performance and Maintenance**, and click **System**. The **System Properties** window appears.

- 3 Select the **Hardware** tab, and click **Device Manager**. The **Device Manager** window, which lists the hardware devices, appears.
- 4 Double-click **DVD/CD-ROM drives**.
- 5 Double-click the listed drive name, and click the **Properties** tab.
- 6 Click the **Enable digital CD audio for this CD-ROM device** check box if it is not already selected.

Frequently asked questions

Why won't my speakers work?


- Make sure the speakers are properly connected and the volume is turned up loud enough to hear sound.
- Your speakers may not be designed for computer use.
- If the speakers have a mute button, set the button to off.
- If you are using battery power, make sure the battery(s) is inserted properly and is charged.
- If you have connected an audio cable to the Headphone jack, disconnect the cable and use the speaker cable that was supplied with the speakers.
- Use the Application Recovery CD(s) to reinstall the drivers. See “Using the Application Recovery CD(s)” for more information.

Why can't I hear sound from my speakers?

- If you are using battery power, make sure the battery is properly inserted and is charged.
- If you are using an application that has its own volume control, make sure the volume control is properly set.
- Your speakers may be set to mute, the volume setting may be too low, or the audio option may be disabled. See “Adjusting the volume” and “Enabling the audio feature” for more information.

Why don't the Fn+F3 or the Fn+F4 key combinations work?


The computer may not recognize the **Fn+F3** and **Fn+F4** key combinations if the correct speakers are not selected. Follow these steps:

- 1 Right-click the **Volume** icon  on the taskbar, and select **Adjust Audio Properties**.
- 2 Select the **Audio** tab, and click **Advanced** in the **Sound Playback** box. The **Advanced Audio Properties** window appears.
- 3 Click the **Speakers** tab, if it is not already selected.
- 4 Select the correct stereo speakers from the **Speaker setup** drop-down list.



Why do I hear noise distortion while listening to music with speakers or headphones?

You may experience noise distortion while listening to music with speakers or headphones if the CPU control is set to Automatic Profile Selection. Use the preinstalled PowerPanel™ software to set the CPU control to Performance or Battery Life.



To change the CPU control


- 1 Right-click the **CPU** icon  on the Windows® taskbar, and click **Edit/Create Profiles**. The **Profile Editor** window appears.
- 2 In the left panel, click the power management profile that you want to set. Maximum Battery Life is the default selection when your computer is running on battery power.
- 3 In the right panel, double-click either **CPU Control (Plugged in)** or **CPU Control (Running on batteries)**, depending on the power source you are using. A menu of CPU Control options appears.
- 4 Select an option. If you use a memory-intensive application, set the CPU control to **Performance**.
- 5 Click the **File** menu, and select **Save**.
- 6 Close the **Profile Editor** window.


Why doesn't my volume control dial work?

- Your volume dial control will work only when the **Volume** icon  is set to an audible level. Use the **Volume** icon to increase the volume.
 - 1 Double-click the **Volume** icon  on the taskbar. The **Volume Control** window appears.

- 2 In the **Volume Control** column, move the slider up to increase the volume. If **Mute all** is selected, click the check box to cancel it.

 Unlike the **Volume** icon , the volume dial control adjusts only the sound level from the speakers or headphones.

- You can also press **Fn+F4** to increase the volume. If you double-click the **Volume** icon  on the Windows® taskbar, you can view your changes on the **Volume Control** window.

 The **Volume** icon  and **Fn+F4** shortcuts will work only when the volume dial control is set to an audible level.

Using Microphones

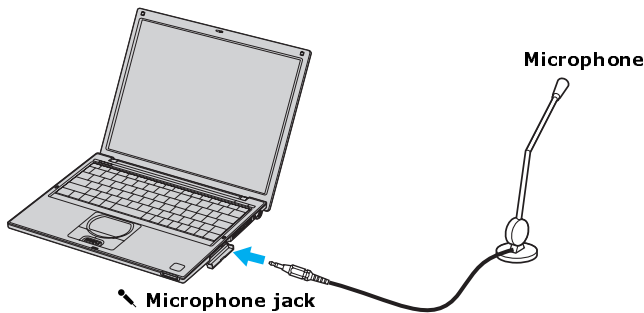
You can connect an external microphone to your computer to enhance the sound input to your computer. Make sure your microphone is designed for computer use. If you wish to purchase a microphone, shop Sony online at <http://www.sonymstyle.com/vaio> or contact your local retailer.


- Connecting a microphone
- Disconnecting a microphone
- Using a microphone or other device to record
- Frequently asked questions

Connecting a microphone


Plug the microphone cable into the Microphone jack*  on the computer.

Connecting a Microphone Jack





 See the manual that came with your microphone for more information on its installation and use.

Disconnecting a microphone


You can disconnect an external microphone when the computer is on or off. Simply unplug the microphone cable from the Microphone jack  on the computer.

* A protruding dot located next to the Microphone jack distinguishes this jack from the Headphone jack.

Using a microphone or other device to record

You can record messages, memos, or other recordings in analog by connecting a microphone or other audio device to the Microphone jack  on your computer, port replicator, or docking station and switching the jack functionality. The Microphone jack  is for MIC IN (monaural).

To record from a microphone or audio device

- 1 Double-click the **Volume** icon  on the Windows® taskbar. The **Volume Control** window appears.
- 2 Click **Properties** from the **Options** menu. The **Properties** window appears.
- 3 Click to select the **Recording** option in the **Adjust volume for** box, and click **OK**. The **Recording Control** window appears.
- 4 Click the **Select** check box at the bottom of the **Microphone** column, if it is not already turned on. Close the **Recording Control** window.
- 5 Click **Start**, and select **All Programs, Accessories, Entertainment**, and then **Sound Recorder**. The **Sound - Sound Recorder** window appears.



For help using Sound Recorder, click **Help** in the **Sound Recorder** window.


To adjust the volume for recording sound

You can only adjust the volume for recording in the **Recording Control** window.

- 1 Click **Start**, and click **Control Panel**.
- 2 Click **Sounds, Speech, and Audio Devices**, and click **Sounds and Audio Devices**. The **Sounds and Audio Devices Properties** window appears.
- 3 Select the **Audio** tab, and click **Volume** in the **Sound recording** box. The **Recording Control** window appears.
- 4 Click and drag the **Microphone** slider up to increase volume and down to decrease volume.

Frequently asked questions

Why doesn't my microphone work?

If you are using an external microphone, make sure the microphone is properly plugged into the Microphone jack  on the computer. See “Connecting a microphone” for more information.

PC Cards and Floppy Disk Drives

- Using Floppy Disk Drives
- Using PC Cards

Using Floppy Disk Drives



You can connect a floppy disk drive to your computer. The floppy disk drive enables you to read data stored on a floppy disk.

- Connecting a floppy disk drive
- Inserting and removing floppy disks
- Disconnecting a floppy disk drive
- Carrying the floppy disk drive
- Frequently asked questions

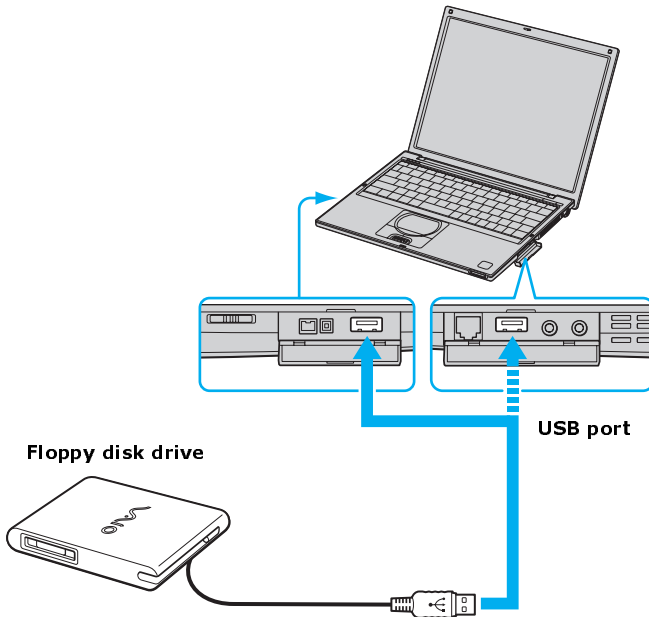
Connecting a floppy disk drive

You can connect a floppy disk drive when your computer is on or off. Connecting the drive when the computer is in a power saving mode (Standby or Hibernate) may cause the computer to malfunction.

To connect a floppy disk drive

- 1 Close any active programs to prevent data loss.
- 2 Insert the USB connector (with the USB icon  facing upward) into the USB port .

Connecting a Floppy Disk Drive



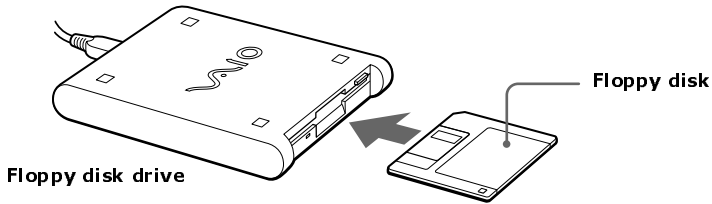
Inserting and removing floppy disks

Floppy disks are portable devices that store data. To protect your floppy disks, keep them away from magnets and direct sunlight or other heat sources.

To insert a floppy disk

- 1 Hold the floppy disk with the label facing up.
- 2 Push the floppy disk into the drive until it clicks into place.


Inserting a Floppy Disk



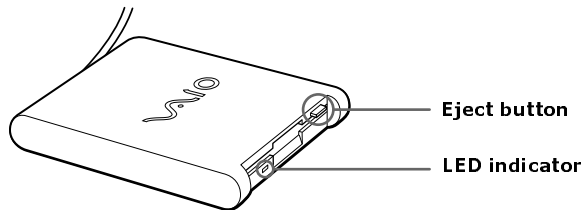
 Do not open the shutter manually and touch the surface of the floppy disk.

To remove a floppy disk

- 1 Close all programs that were opened from the disk and wait for the LED indicator to turn off.
- 2 Push the Eject button, and remove the disk.

 To avoid losing data, do not push the Eject button when the LED indicator is on.


Removing a Floppy Disk



Disconnecting a floppy disk drive

You can disconnect a floppy disk drive when the computer is on or off. Disconnecting the drive when the computer is in a power saving mode (Standby or Hibernate) may cause the computer to malfunction.

To disconnect a floppy disk drive

- 1 Close any active programs to help prevent data loss.
- 2 Double-click the **Safely Remove Hardware** icon  on the taskbar. The **Safely Remove Hardware** window appears.
- 3 Click to select the floppy disk drive in the **Hardware devices** window, if it is not already selected.
- 4 Click **Stop**. The **Stop a Hardware device** window appears.
- 5 Make sure the appropriate device is selected, and click **OK**. A message appears stating it is safe to remove the hardware device.
- 6 Unplug the floppy disk drive from the computer, port replicator, or docking station.

Carrying the floppy disk drive

Fold the floppy disk drive cable and connector into the side compartment on the floppy disk drive.

Carrying a Floppy Disk Drive



Frequently asked questions

Why doesn't the Safety Remove Hardware icon appear on the taskbar when the drive is connected?

The computer does not recognize that the floppy disk drive is connected to the computer. First, make sure the USB connector is properly inserted into the USB port. If you need to secure the connection, wait a few moments for the computer to recognize the drive. If the icon still does not appear, follow these steps:

- 1 Close all open programs to avoid data loss.
- 2 Eject the floppy disk from the floppy disk drive. See “To remove a floppy disk.”
- 3 Reconnect the floppy disk drive. See “To connect a floppy disk drive.”
- 4 Restart the computer.

Why is the drive unable to write data to a floppy disk?

The floppy disk drive cannot write data to a disk if it is inserted into the drive improperly. See “Inserting and removing floppy disks” for instructions on how to insert the disk properly. If the disk is inserted properly and you are still unable to write data to it, the disk may be write-protected. You can either use a floppy disk that is not write-protected or disable the write-protect feature.

Using PC Cards

Your computer includes one or more PC Card slots. A PC Card enables you to connect portable external devices such as another hard disk drive or a PC Network Interface Card (NIC) to connect to a network.


See your VAIO® Computer Specifications for the type of PC Card that is compatible with your computer. These slots are compatible with CardBus. If your computer has more than one PC Card slot, use the lower slot for Type III PC Cards. You do not need to turn off your computer to insert or remove a PC Card.

- Inserting PC Cards
- Removing PC Cards
- Connecting and disconnecting PC Card drives
- Frequently asked questions

Inserting PC Cards

Your computer may contain PC Card slot protectors. Remove these protectors before you insert a PC Card into the slot. See “To remove slot protectors.”

To insert a PC Card

- 1 Make sure the front label of the PC Card is facing up.
- 2 Push the PC Card gently into the slot. The PC Card is automatically detected by your system. The **Safely Remove Hardware** icon  appears on the taskbar, indicating your system detected the PC Card.

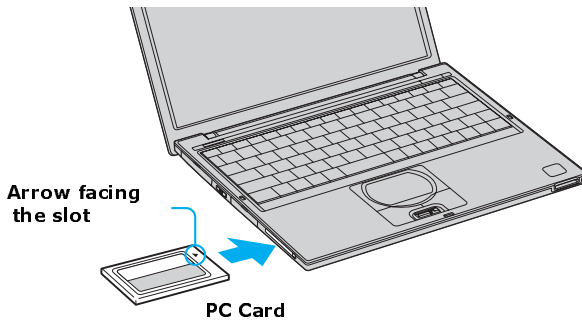


Do not force a PC Card into the slot. It may damage the connector pins.

When a PC Card is inserted, do not place your computer in a bag or case. Pressure or shock to a PC Card may damage your computer.

Touching the head of the PC Card will not damage to the connector pins, but damage may occur if the head of the PC Card is sticking out of the PC Card slot while the computer is being transported.

Inserting a PC Card




Removing PC Cards

You can remove PC Cards while the computer is on or off. PC Cards draw power from the computer when they are inserted into the PC Card slot, whether or not you use the card.

If you are not using your PC Card and you are using a battery as a power source, remove the PC Card from the PC Card slot to conserve battery power.

To remove a PC Card while your computer is on

- 1 Double-click the **Safely Remove Hardware** icon  on the taskbar. The **Safely Remove Hardware** dialog box appears.
- 2 Click to select the PC Card in the **Hardware devices** window, if it is not already selected.
- 3 Click **Stop**. The **Stop a Hardware device** window appears.
- 4 Make sure the PC Card is selected, and click **OK**. A message appears stating it is safe to remove the hardware device.
- 5 Push the Release button. The Release button pops out.
- 6 Push the Release button a second time. The PC Card pops out.
- 7 Gently pull the card out of the slot.

To remove a PC Card while the computer is off

- 1 Push the Release button once. The Release button pops out.
- 2 Push the Release button a second time. The PC Card pops out.
- 3 Gently pull the card out of the slot.

To remove slot protectors

- 1 Push the Release button once. The Release button pops out.
- 2 Push the Release button a second time. The slot protector pops out.
- 3 Pull the protector out of the slot. If you use a Type III PC Card, you need to remove both the top and bottom PC Card slot protectors.

Connecting and disconnecting PC Card drives

The PC Card drive enables you to read data stored on a DVD or CD. Your computer may come with an external PC Card drive, depending on the model you purchased. If you wish to purchase an optional PC Card drive, shop Sony online at <http://www.sonymstyle.com/vaio> or contact your local retailer.



If you connect a non-Sony DVD drive to your VAIO® computer, DVD playback may not function properly. The supplied DVD software must be installed to play a DVD. For best performance, use a Sony compatible DVD drive.

To connect an PC Card drive

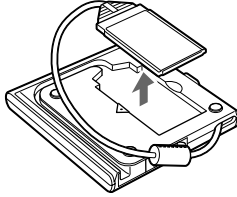
You can connect a PC Card drive while the computer is turned on. Connecting the drive when the computer is in a power saving mode (Standby or Hibernate) may cause the computer to malfunction.



Instructions on connecting an optical drive may vary, depending on the specific drive you purchased.

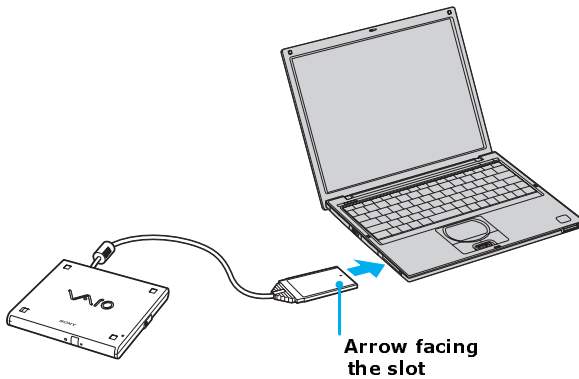
- 1 Remove the PC Card from the bottom of the optical drive.


Removing a PC Card



- 2 Insert the PC Card into the PC Card slot with the arrow facing the slot. See “To insert a PC Card” for more information.


Connecting a PC Card drive



 Remove the protective cover that is attached to the lens of the optical drive before you use the drive. See “Inserting and Ejecting CDs or DVDs” for information on how to open the optical drive to access the lens.

See the manual that comes with your optical drive for more information on its installation and use.

To disconnect a PC Card drive

- 1 Close any active programs to help prevent data loss.
- 2 Double-click the **Safely Remove Hardware** icon  on the taskbar. The **Safely Remove Hardware** window appears.
- 3 Select the PC Card drive in the **Hardware devices** window, if it is not already selected.
- 4 Click **Stop**. The **Stop a Hardware device** window appears.
- 5 Make sure the PC Card drive is selected, and click **OK**. A message appears stating it is now safe to remove the hardware device.
- 6 Eject the PC Card from the PC Card slot.

Frequently asked questions

Why doesn't my PC Card work?

- Make sure the PC Card is inserted properly. See “To insert a PC Card” for more information.
- Make sure the PC Card is compatible with the Microsoft® Windows® operating system installed on your computer.
- Make sure any necessary drivers were installed properly.

Why doesn't my computer recognize attached devices?

For some PC Cards, if you alternate between normal power operation and the Standby or Hibernate modes while the card is inserted into the PC Card slot, the computer may not recognize the PC Card or the connected device. Restart your computer.

Why can't I insert my PC Card?

- Make sure you are orienting the card correctly. See “To insert a PC Card” for more information.

- ❑ Check the manual that came with your PC Card for more information on its use.
- ❑ You may not be able to use some PC Cards or some functions of the PC Card with this computer.

Why does an exclamation mark (!) appear on the Device Manager tab in the System Properties dialog box?

You may not be using the most recent software driver provided by the PC Card manufacturer. Make sure the necessary drivers are installed. You may need to remove the software driver, and reinstall it.

Connecting Mice and Keyboards

- Using External Mice and Keyboards

Using External Mice and Keyboards

You can connect a universal serial bus (USB) mouse or keyboard to your computer. To function properly, the device you connect must be compatible with the Microsoft® Windows® operating system installed on your computer. For information about your computer's built-in keyboard and key functions, see "Using the Keyboard" in the "Computer Features" chapter.



- Connecting a Mouse or Keyboard
- Disconnecting a mouse or keyboard
- Frequently asked questions

Connecting a Mouse or Keyboard

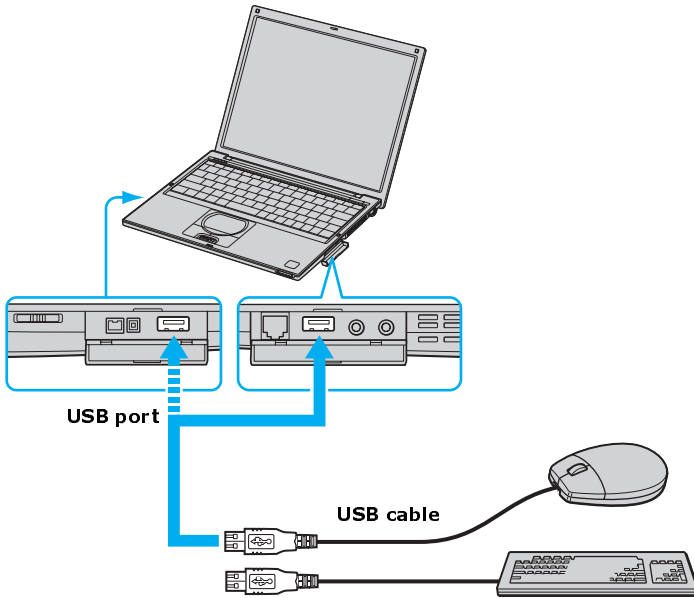
Your computer is compatible with many popular mice and keyboards. The New Hardware Wizard guides you through the software installation process. Some devices require separate driver software installation. See the instructions that accompanied your mouse or keyboard for more information. If the mouse or keyboard does not work once you have connected it to your computer, see "Frequently asked questions" for more information.


Your computer can be turned on or off when connecting a mouse or keyboard.

To connect a USB mouse or keyboard to your computer

- 1 Locate the USB port  on your computer, port replicator, or docking station.
- 2 Plug the USB cable into the USB port  on the computer. (One USB port supports one USB device.)
The **New Hardware Wizard** appears.
- 3 Follow the on-screen instructions to complete the installation process.

Connecting a USB Mouse or Keyboard




 See the manual that came with your mouse or keyboard for more information on its installation and use.

Disconnecting a mouse or keyboard

You can disconnect a USB mouse or keyboard when the computer is turned on or off. Disconnecting the USB mouse or keyboard when the computer is in a power saving mode (Standby or Hibernate) may cause the computer to malfunction.

To disconnect the USB mouse or keyboard when the computer is off



- ❑ Unplug the USB cable from the USB port  on the computer.

Frequently asked questions

Why doesn't the computer recognize the USB mouse?

- ❑ Make sure the mouse is securely plugged into the USB port. See “Connecting a Mouse or Keyboard” for more information.
- ❑ You may need to install or reinstall the mouse driver software. Use the supplied Application Recovery CD to install the drivers. See “Using the Application Recovery CD(s)” for more information.

Why doesn't the pointer move when I use the USB mouse?

- ❑ Make sure another mouse was not installed.
- ❑ You may need to install or reinstall the mouse driver software. Use the supplied Application Recovery CD(s). See “Using the Application Recovery CD(s)” for more information.
- ❑ If you are playing a disc, press the Ctrl+Alt+Delete keys simultaneously to stop playback and restart the computer.
- ❑ If you still cannot use the pointer, turn off and restart the computer. You can turn off the computer three different ways.
 - 1 Press the **Windows** key , and press **U**. When the **Turn off computer** window opens, press **R**.
 - 2 Press the **Ctrl+Alt+Delete** keys simultaneously. When the **Windows Task Manager** window appears, press the **Alt** key to highlight the menu bar, and press the **Right Arrow**  key to select **Shut Down**. Press **Enter**, and then press **R**.
 - 3 Press and hold the power button for more than four seconds.

Preinstalled Programs

- ❑ Software Programs On Your Computer
- ❑ DVgate Application Notes

Software Programs On Your Computer

Your computer may not be supplied with all of the software listed in Software overview, depending on the configuration you purchased. Preinstalled software may not be identical to retail versions or include supporting documentation.

- Software overview
- Frequently asked questions

Software overview

Adobe® Acrobat® Reader®

Adobe Systems Inc.

Acrobat Reader software allows you to view, navigate, and print electronic documents in Adobe's Portable Document Format (PDF), an open file format that is intended to preserve the fidelity of documents created on all major computer platforms.

Adobe® Photoshop® Elements Trial Version

Adobe Systems Inc.

Using state-of-the-art image editing tools, you can unleash your artistic ability and create digital images for print, e-mail, and posting to the Web. The versatile image capturing options enable you to start working with digital and traditional photos immediately. Explore extensive creative possibilities for your personal images with Adobe Photoshop Elements software. This trial version allows you to evaluate the software for 30 days, after which you can purchase the full program for a special price.

America Online®

America Online, Inc.

America Online is a popular Internet online service. Stay in touch with family and friends with easy-to-use e-mail. Manage your personal finances, get the latest news and sports scores, and chat with thousands of others who share your interests.

DigitalPrint

Sony Electronics Inc.

This image management software makes it fun and easy to edit, import, and organize your digital pictures in a photo album for rich digital printing to any standard color laser or ink-jet printer. DigitalPrint can also be used to make custom CD labels for your audio CDs.

DVgate™

Sony Electronics Inc.

Connect a digital video camera recorder to the i.LINK® port and capture your own video clips and still images. You can edit clips from your video, add new clips, and combine clips into new movie segments. You can also save your images in a variety of popular file formats.

EarthLink Network Total Access®

EarthLink, Inc.

An Internet Service Provider that supplies access, information, and assistance to its customers, introducing them to the Internet. Member benefits include e-mail, newsgroups, a Personal Start Page, free storage space for your personal Web site, a member magazine, and 24-hour technical support.

Microsoft® Word (On selected models)

Microsoft Corp.

Microsoft Word makes it easy to create common Web, e-mail, and print documents for use around the world. It embraces HTML as a first-class file format and extends Word's ease-of-use to the Web and e-mail. Word also extends that ease-of-use to international users, making it easy to create multilingual documents.

MovieShaker™

Sony Electronics Inc.

Sony's original MovieShaker software creates personal movies that have transitions, background music, and text. Just import your video clips and "shake" with a click of the mouse. Your personal movies are easy to create and fun to share with family and friends.

OpenMG™ Jukebox

Sony Electronics Inc.

OpenMG Jukebox software enables you to import digital audio files by downloading audio files from Electronic Music Distribution (EMD) services over digital networks, such as the Internet. You can record audio CDs onto your hard drive in a variety of formats.

PC-Cillin® 2000

Trend Micro, Inc.

PC-Cillin software provides portable, easy-to-use, real-time antivirus security at your computer's entry point (beaming, synchronization, Internet access) to defend against potential threats hidden inside files, e-mail, or on the Web.

PicoPlayer™

Sony Electronics Inc.

PicoPlayer software is a video player utility that enables you to use Giga Pocket™ Personal Video Recorder functions on a computer that does not have Giga Pocket Personal Video Recorder installed. You can play Video Capsules created by Giga Pocket Personal Video Recorder, and, if a Giga Pocket Server is available on your home network, watch TV streamed from the Giga Pocket Server and remotely control the Giga Pocket Server's TV programming functions.

PictureGear™

Sony Electronics Inc.

This image management software displays images from your hard drive, a Sony digital still camera, or a Sony Mavica® camera. The images appear in a convenient light-table format, so that you can easily view the contents of an entire folder.

Quicken®

Intuit Inc.

Quicken software is the fastest, easiest way to organize your finances. Quicken software works just like your checkbook, so it's easy to learn and use. You can even pay your bills online. Quicken software manages all of your finances, bank accounts, credit cards, investments, and loans.

QuickTime®

Apple Computer, Inc.

The versatile QuickTime software is used to play hundreds of different kinds of files, including video, audio, and virtual reality (VR) movies. You can play QuickTime files (referred to as “QuickTime movies”) using QuickTime Player or any other application, such as a Web browser or word processor, that supports QuickTime software.

RealJukebox®

RealNetworks, Inc.

RealJukebox software is a popular digital music system that gives you the ability to easily acquire, play and manage digital music files. You can locate and download your favorite music from the Internet and organize your own personal music collection.



If you are using an external CD-ROM drive connected with a PC Card, be sure to connect your external CD-ROM drive before starting RealJukebox. Additionally, do not remove your CD-ROM drive while using RealJukebox. Either of these actions may cause RealJukebox to shut down improperly.

RealPlayer®

RealNetworks, Inc.

RealPlayer software is a high-quality streaming media player that supports many digital media formats. The user-friendly interface has enhanced navigation capabilities, allowing you to access and enjoy audio and video programming over the Internet. RealPlayer software is your gateway to a superb Internet multimedia experience.

Smart Capture

Sony Electronics Inc.

Smart Capture is a fun new way to send multimedia messages via e-mail. Smart Capture manages the i.LINK® connection between your notebook and a Sony Digital Handycam® Camcorder that supports the i.LINK interface. It allows you to capture compressed video or still images and save them to your hard disk drive or share via e-mail. A smart solution for computer, digital audio/video and network convergence.

SonicStage™

Sony Electronics Inc.

This new jukebox application adds a host of new features to its predecessor, OpenMG™ Jukebox. Continuing to take advantage of Sony's copyright-protected ATRAC3™ format for high-quality digital audio storage, SonicStage software sports a new music visualizer, a sleek new player skin design, audio CD burning capability, and a parametric equalizer for fine-tuning audio playback.

Sony ScreenBlast™ ACID (On selected models)

Sony Pictures Digital Entertainment

With the powerful Sony ScreenBlast ACID software you can create royalty-free music by utilizing its loop-based production tool, including unlimited tracks and enhanced effects.

Sony ScreenBlast™ Sound Forge (On selected models)

Sony Pictures Digital Entertainment

Sony ScreenBlast Sound Forge allows you to record, edit, and process mono or stereo audio files for your multimedia or Internet projects. Whether you want to use a number of professional effects, convert video into streaming media, or synchronize audio to video — this software has everything you need to create rich, immersive multimedia and Internet content.

Sony on Yahoo!

Yahoo! Inc.

Personalize your own web portal with Sony on Yahoo! Get a free webmail account, customized news and local weather reports, comics, instant messaging, and more.

VAIO Support Agent

Sony Electronics Inc.

VAIO Support Agent provides immediate, interactive, online support with information about your preinstalled software and answers to frequently asked questions.

WinDVD®

InterVideo, Inc.

WinDVD software is a simple-to-use DVD player including all the features you would expect to find in a standard consumer DVD player, while also offering advanced display and navigation features such as zoom, pan, bookmark, and time search.

Frequently asked questions

What do I do when my program stops responding or crashes?

Contact the software publisher or designated provider for technical support. See “Software Support Information” or contact information.

Why does the message, “You must insert the Application CD into your optical drive” appear, and the software does not start?

- Some titles require specific files that are located on the Application Recovery CD. Insert the disc, and try starting the program again.
- Your optical drive may not be reading the disc.
- Make sure you place the CD in the tray with the label side facing up.
- Make sure the optical drive is properly connected to your computer. See “Connecting External Optical (Disc) Drives” for more information.

Why can't the program find a file while a PC Card is inserted?

When inserted into a computer that is connected to the docking station, some PC Cards may change the drive letters of the disk drives in the docking station. If this occurs, a program you are using may not find files. Do one of the following:

- Remove the PC Card, and restart your computer. Do not insert the PC Card while using that program.
- Change the drive letters of the disk drives of the docking station or the PC Card disk drives. See the Windows® help files or the program guide to change the drive letters.

What software do I use for CD-R/CD-RW software functions?

Sony recommends using the preinstalled SonicStage software and Windows® XP to create CDs on your VAIO® computer, if the specific model you purchased is preconfigured with all of the necessary components for CD-R and CD-RW capability.

Downloading the optional RealJukebox CD-burning component to create CDs on your computer may interfere with normal system operations.

Why can't I use the DVgate software?

If your computer is using the Ultimate Battery Life profile as a power saving mode, you cannot use DVgate™ software. Please select another profile. Preferably, connect your computer to AC power when using these features.

DVgate Application Notes

- ❑ Recording images to a digital video device
- ❑ Adjusting image resolution
- ❑ Saving to your hard disk drive

Recording images to a digital video device

If your system displays the message, “Failed to record to DV deck, please check deck’s power status, cable connection...,” while you are recording images to a digital video device using DVgate software, close all open applications, and restart your computer. Frequent recording of images to a digital video device while using DVgate may cause this situation to occur.

For more information on DVgate software, see the DVgate online help.

Adjusting image resolution

If the images on the LCD do not display smoothly, the resolution may not be set correctly.

To check the resolution

- 1 From the **DVgate Motion-Monitor** window, click **Setup**.
- 2 From the shortcut menu, point to **Settings**, and then select **Low Resolution**. The settings you change in this menu affect the images in the monitor window only. Movie data imported to your hard drive and images recorded to DV devices will not be affected.

Saving to your hard disk drive

In order to improve the performance of your computer’s DVgate™ motion software, the hard disk drive on your computer has been formatted with two partitions, C and D. The C partition holds 40 percent and the D partition holds 60 percent of the entire drive capacity. DVgate software saves files to the D partition. This prevents large video capture from consuming the available space on your C partition. To maintain optimum performance of DVgate, you should defragment or format the D partition regularly.

To defragment a partition

- 1 Back up all files you want to save.
- 2 From the **Start** menu on the Windows® taskbar, point to **All Programs**, **Accessories**, **System Tools**, and then click **Disk Defragmenter**. The **Disk Defragmenter** dialog box appears.
- 3 Select the drive you want to defragment from the list, and click **Defragment**. See the Windows® operating system Help guide for more information on defragmenting.

Memory Upgrades

- ❑ Upgrading Your Computer's Memory

Upgrading Your Computer's Memory

Before you begin upgrading your computer's memory, make sure you read "Precautions and procedures." See VAIO® Computer Specifications on the "Welcome" page for the type of module and amount of memory installed on your computer and also see "Typical expansion memory configuration" below. Expansion memory modules are available as options. For memory upgrades and information about which memory modules to use, refer to your VAIO® Computer Specifications.

- Precautions and procedures
- Typical expansion memory configuration
- Removing and installing memory modules
- Confirming added memory capacity

Precautions and procedures

The procedures described below assume familiarity with the general terminology associated with personal computers and with the safety practices and regulatory compliance required for using and modifying electronic equipment.



Sony recommends that memory upgrades be performed by an authorized Sony Service Center. To find the nearest center or agent, go to: <http://www.sony.com/pcsupport>.

When installing a memory module in your computer, and make sure you read the proper safety precautions below. Mistakes that occur when installing or removing a memory module may cause a malfunction.

- Disconnect the computer from its power source and from any telecommunications links, networks, or modems before you install or remove a memory module. Failure to do so may result in personal injury or equipment damage.
- Electrostatic discharge (ESD) can damage disk drives and other components. Perform the procedures described below only at an ESD workstation. If such a station is not available, do not work in a carpeted area, and do not handle materials that produce or hold static electricity (cellophane wrappers, for example). Ground yourself by maintaining contact with an unpainted metal portion of the chassis while performing the procedure.

- ❑ Do not open the memory module package until you are ready to install the module. The package protects the module from ESD.
- ❑ Use the special protective package to store a memory module and prevent ESD, or wrap the memory module in aluminum foil.


Typical expansion memory configuration

Total System Memory (MB)	On board (MB)	Slot (MB)
128	128	0
256	128	128

Removing and installing memory modules

Make sure you read “Precautions and procedures” before you remove or install a memory module. When installing a memory module, do not open the module package until you are ready to install it. The package protects the module from Electrostatic discharge (ESD).

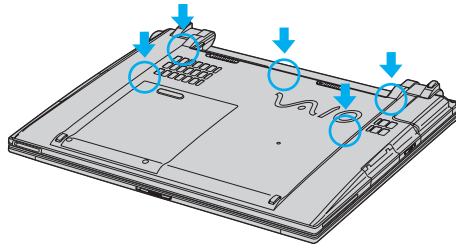
To remove and install a memory module

- 1 Turn off the computer and all peripheral devices.
 - 2 Disconnect the power cord and all cables from the computer.
 - 3 If installed, remove the battery. See “To remove the battery.”
 - 4 Wait for the computer to cool down.
-  The interior of the computer becomes extremely hot during operation. Wait at least one hour for the computer to cool down before you remove the screws.
- 5 Use an appropriate screwdriver to loosen and remove the screws on the bottom of the computer.



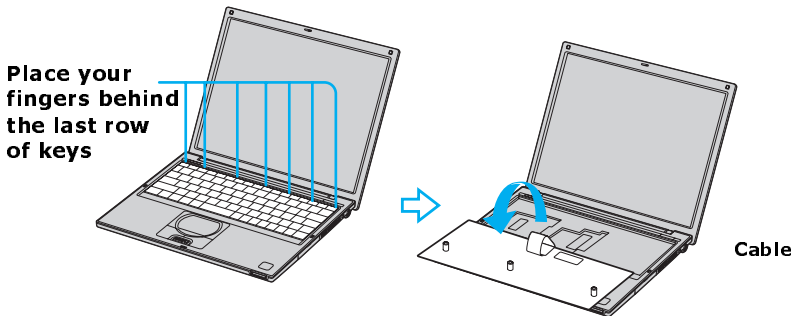
To avoid damaging the computer, do not remove or loosen any other screws.

Removing the Bottom Screws



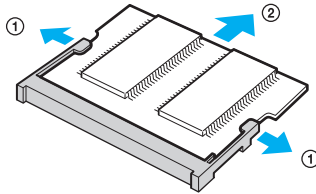
- 6 Turn the computer over so you are looking at the keyboard.
- 7 Place your fingers behind the last row of keys.
- 8 Gently lift the keyboard up and turn it over the touch pad. Do not detach the cable when lifting the keyboard.

Lifting the Keyboard



- 9 Touch a metal object (such as the connector panel on the back of your computer) to discharge static electricity.
- 10 Remove the memory module by pulling out the tabs (see arrows No. 1), and pulling out the module in the direction of arrow No. 2.

Removing a Memory Module

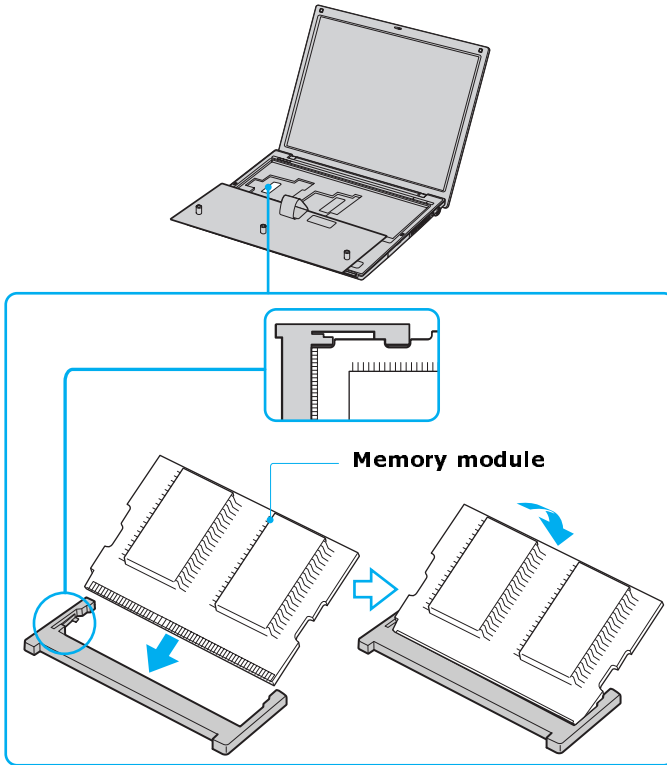


- 11 Remove the existing memory module.
- 12 Remove the new memory module from its packaging.
- 13 Install the memory module by sliding it into the open slot at a 45-degree angle.



Do not touch any part of the motherboard or the other components inside the computer.

Installing a New Memory Module



- 14 Snap the connectors into place when the board is correctly seated.
- 15 Close the computer cover and replace the fastening screws on the bottom of the computer.
- 16 Make sure the system memory matches the amount of installed memory. See “Confirming added memory capacity.”

Confirming added memory capacity

After you've installed a new memory module, make sure the operating system's memory corresponds with the memory upgrade.

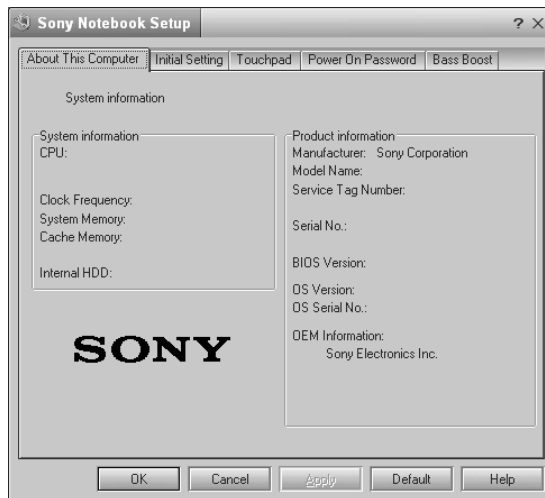
To check your system's memory

- 1 Turn on the computer.
- 2 Click **Start** on the Windows® taskbar, point to **All Programs**, and then point to **Sony Notebook Setup**.
- 3 Click **Sony Notebook Setup** from the submenu. The **Sony Notebook Setup** dialog box appears.
- 4 Click the **About This Computer** tab. Verify that the **System Memory** displayed in the left panel matches the amount of memory installed.



The displayed memory may be less than the installed memory due to the amount used by the display adapter.

Sony Notebook Setup Dialog Box



Using the Recovery CDs

- ❑ Application and System Recovery CDs
- ❑ Using Your Recovery CDs

Application and System Recovery CDs

Your computer comes with the following Application Recovery and System Recovery CDs. You will need an optical drive to use these recovery CDs. If your computer does not come with an optical drive, use an external optical drive.

Application Recovery CD(s)

Sony Electronics Inc.

This CD enables you to reinstall individual software programs and device drivers if they become corrupted or are erased.

System Recovery CD(s)

Sony Electronics Inc.

This CD enables you to restore the operating system and software that shipped with your computer if they become corrupted or are erased. This CD restores your computer to its original factory settings, so user data and software programs installed since you started using your computer will be lost.


Using Your Recovery CDs

The following sections describe how to use the Application Recovery and System Recovery utilities.

- Using the Application Recovery CD(s)
- Using the System Recovery CD(s)


Using the Application Recovery CD(s)

The Application Recovery CD(s) utility enables you to reinstall individual software programs, device drivers, and repair software programs if they become corrupted or are erased. Reinstalling an individual program or device driver may correct a problem you are experiencing with your computer, peripheral hardware, or software. You may not need to reinstall the entire contents of your hard disk. To reinstall all the software titles that shipped with your computer, use the System Recovery CD(s). See “Using the System Recovery CD(s)” for more information.

 You must be using a Windows® operating system to run the Application Recovery CD utility.


To reinstall programs with the Application Recovery CD(s)

- 1 Turn on your computer. If your computer is already on, close all open programs.
- 2 When the Windows® desktop appears, insert Sony Application Recovery CD No. 1 into your computer's optical drive. The Application Recovery utility loads automatically.
- 3 Click **OK** in the VAIO welcome window. The **Sony Application Recovery Program** window appears.
- 4 Double-click the **Software** folder icon.
- 5 Select the icon for the application you want to restore, and then follow the on-screen instructions to complete the recovery process.

 Your system may include one or more Application Recovery CDs. If you have more than one Application Recovery CD, insert the first CD to run the Application Recovery program. You may be prompted to insert the next CD, depending on the application you wish to restore.

To reinstall device drivers with the Application Recovery CD(s)

- 1 Click **Start** on the Windows® taskbar, and right-click **My Computer**.
- 2 Click **Properties**. The **System Properties** dialog box appears.
- 3 Click the **Hardware** tab, and click **Device Manager**.
- 4 Right-click the unknown device or the device that requires the driver installation, and click **Update Driver** from the shortcut menu.

 The unknown devices(s) is identified by a yellow question mark or exclamation point.

- 5 In the Hardware Update Wizard, click to select **Install from a list or specific location (Advanced)**.
- 6 Click **Next**.
- 7 Click to cancel the **Search removable media (floppy, CD-ROM...)** option.
- 8 Click to select **Include this location in the search**.
- 9 Insert Application Recovery CD No. 1 into the optical drive.

- 10 Click **Browse**. The **Browse For Folder** dialog box appears.
- 11 Click to open the **ARCD** folder, and then open the drivers folder.
- 12 Click the folder name of the device in which you want to reinstall, and click **OK**. The **Hardware Update Wizard** appears.
- 13 Click **Next**.
- 14 Select the driver location that you selected in Step 12, and click **Next**. The Microsoft® Windows® operating system automatically reinstalls the device driver(s) from the Application Recovery CD.
- 15 Click **Finish**, and remove the Application Recovery CD from the optical drive.
- 16 Turn off your computer by clicking **Start**, and then **Turn off computer**.
- 17 Wait 30 seconds, and turn on your computer.

If you have any questions about using the Application Recovery CD(s), visit <http://www.sony.com/pcsupport>, or contact Sony Customer Support at 1-888-4-SONY-PC.

Using the System Recovery CD(s)

The System Recovery CD(s) enables you to format your hard disk and restores all original software programs. Your computer is returned to the original factory settings.



The System Recovery process removes all software that you may have installed since you started using your computer. Reinstall any software programs that were not included with the computer when you purchased it.

You can use the System Recovery CD(s) to reinstall the operating system and software titles that shipped with your computer if they become corrupted or are erased. You may not need to reinstall the entire contents of your hard drive. If you experience a problem with your computer, reinstalling an individual device driver or software title may correct the problem. Use the Application Recovery CD(s) to reinstall individual programs and to reinstall device drivers. See “Using the Application Recovery CD(s)” for more information.

The System Recovery CD(s) contains a backup copy of all the software originally installed on your hard disk. It can be used only to recover the hard disk of the computer you purchased.

System Recovery options

- ❑ **Default System Drive Recovery** — All data on Drive C is deleted. The factory default settings and software programs are restored on this drive only.
- ❑ **Change Partition Size** — All partitions, custom installations, and changes are removed from the hard drive. You can set the partition sizes for both the Drive C and Drive D. The original, preinstalled operating system and software programs are restored.
- ❑ **Recovery to Original Factory Defaults** — All data and partitions are removed from the hard drive. All original factory settings, operating system, and preinstalled software are restored.



The System Recovery utility does not back up your system's data. If you wish to retain your system data, perform a backup to an external media.


To use the System Recovery CD(s)

Your system may take a few minutes to load necessary files. A blue screen may appear during the downloading process.

- 1 Insert the Sony System Recovery CD in the optical drive. The first CD must be in the drive before you restart your computer.
- 2 Turn off your computer by clicking **Start**, and then **Turn off computer**.
- 3 Wait 30 seconds, and turn on your computer. The System Recovery utility restarts from the optical drive.
- 4 When the **VAIO System Recovery Utility** wizard appears, click **Next**.
- 5 Follow the on-screen instructions to complete the recovery process.

If your computer does not start from the Recovery CD

- 1 Press the power button and hold it for more than four seconds to turn off the computer.
- 2 Turn on the computer. When the Sony logo is displayed, press the **F2** key. The **BIOS Setup Utility** appears.
- 3 Press the right arrow key **→** to select the **Exit** menu.
- 4 Press the down arrow key **↓** to select **Get Default Values**, and press **Enter**. The **Setup Confirmation** window appears.
- 5 Press **Enter** again to select **Yes**.
- 6 Make sure **Exit (Save Changes)** is selected, and then press **Enter**. The **Setup Confirmation** window appears again.
- 7 Make sure **Yes** is selected, and press **Enter**. The computer restarts from the Recovery CD.

 Your system may include one or more System Recovery CDs. If you have more than one System Recovery CDs, insert the first CD to run the System Recovery program. You are prompted to insert the second CD once the information from the first CD has been installed.

The recovery process takes from 30 to 60 minutes to complete.

After recovering your system using the System Recovery CD(s), you may be prompted to insert your Application Recovery CD(s) after restarting the Windows operating system. Insert the Application Recovery CD to automatically complete recovery of your system.

Troubleshooting and Support

This section describes how to solve common problems you may encounter when using your computer. Many problems have simple solutions, so try these suggestions before you contact Sony Computing Support (<http://www.sony.com/pcsupport>).

- Troubleshooting Your Computer
- Troubleshooting Batteries
- Troubleshooting the Printer
- Troubleshooting the Mouse and Touchpad
- Troubleshooting the Modem
- Troubleshooting Networks
- Troubleshooting DVDs and CDs
- Troubleshooting i.LINK Drives
- Troubleshooting Floppy Disk Drives
- Troubleshooting PC Cards
- Troubleshooting Audio-Video Connections
- Troubleshooting the LCD screen
- Troubleshooting Memory Stick Media
- Troubleshooting Software
- Software Support Information
- Computer Support Information

Troubleshooting Your Computer

Why doesn't my computer start?


- ❑ Make sure the computer is securely plugged into a power source and is turned on. Make sure the power indicator shows the power is on. See “Connecting a Power Source” for more information.
- ❑ Make sure the battery is inserted properly and is charged.
- ❑ If you are connected to a docking station with a floppy disk drive or an external floppy disk drive, make sure the floppy disk drive is empty.
- ❑ If the computer is plugged into a power strip or Uninterruptible Power Supply (UPS), make sure the power strip or UPS is turned on and working.
- ❑ If you are using an external display, make sure it is plugged into a power source and turned on. Make sure the brightness and contrast controls are adjusted correctly. See the manual that came with your display for details.
- ❑ Remove the battery from the computer, unplug the power cord, and plug it in again. Turn on the power.
- ❑ If the power control button does not function, remove the AC adapter and battery. Wait one minute, and then reattach them before pressing the power button.
- ❑ Condensation may cause the computer to malfunction. If this occurs, do not use the computer for at least one hour.
- ❑ Unplug the power cord, press the reset button by using a thin, straight object (such as a paper clip), remove the battery, plug it in again, and turn on the power.

Why does a BIOS error appear when my computer starts?

When the battery is low on power, your system may not start properly, and the message “Press <F1> to resume, <F2> to setup” may appear at the bottom of the screen. Follow these steps:

- 1 Press **F2**. The **BIOS Setup** menu appears.
- 2 Set the date (month/day/year). Press **Enter**.
- 3 Press the **Down Arrow** key **↓** to select **System Time**, and then set the time (hour: minute: second). Press **Enter**.

- 4 Press the **Right Arrow** key → to select the Exit tab, and then press the **Down Arrow** key ↓ to select **Get Default Values**. The message **Load default values for all SETUP items** appears.
- 5 Press **Enter**. The **Setup Confirmation** window appears.
- 6 Select **Yes**, and press **Enter**.
- 7 Select **Exit (Save Changes)**, and press **Enter**. The **Setup Confirmation** window appears again.
- 8 Select **Yes**, and press **Enter**. The computer restarts.

 If this occurs on a regular basis, contact Sony Computing Support (<http://www.sony.com/pcsupport>).

Why does the message “Operating system not found” appear when my computer starts, and why won’t Windows start?

- If you have connected a docking station with a floppy disk drive or an external floppy disk drive, make sure there is no disk in the floppy disk drive (non-bootable).
- If a non-bootable floppy disk is in the drive, proceed as follows:
 - 1 Turn off the computer, and remove the floppy disk.
 - 2 Restart the computer and confirm that the Windows® operating system starts properly.
- If Windows still does not start, follow these steps to initialize the BIOS:
 - 1 Remove any floppy disk from the floppy disk drive.
 - 2 Turn off the computer.
 - 3 Remove any peripheral devices connected to the computer.
 - 4 Restart the computer.
 - 5 Press **F2** when the Sony logo appears. The **BIOS Setup** window appears.
 - 6 Press the **Right Arrow** key → to select the **Exit** menu.
 - 7 Press the **Down Arrow** key ↓ to select **Get Default Values**. The message **Load default values for all SETUP items** appears.

- 8 Press **Enter**. The **Setup Confirmation** window appears.
- 9 Select **Yes**, and press **Enter**.
- 10 Select **Exit (Save Changes)**, and press **Enter**. The **Setup Confirmation** window appears again.
- 11 Select **Yes**, and press **Enter**. The computer restarts.

If your computer continues to display the message “Operating system not found,” and Windows does not start, use your supplied System Recovery CD(s) to restore the software titles shipped with your computer. See “Using the System Recovery CD(s)” for more information.



The System Recovery CD restores your computer to its original state, so user data and applications will be lost.

Why does my computer stop responding or won't turn off?

It is best to turn off your computer using the Turn Off Computer command on the Windows Start menu. Using other methods, including those listed below, may result in loss of unsaved data.

- ❑ Click **Start** on the Windows® taskbar, select **Turn Off Computer**, and then click **Turn Off**.
- ❑ If your computer does not turn off, press **Ctrl+Alt+Delete** simultaneously. The **Windows Task Manager** dialog box appears, and you can turn off the computer from the **Shut Down** menu.
- ❑ If your computer still does not turn off, press and hold the power button for at least four seconds to turn off the power.
- ❑ Unplug the computer from the AC adapter, and remove the battery from your computer.
- ❑ If your computer stops responding while playing a CD or DVD, press **Ctrl+Alt+Delete** simultaneously. The **Windows Task Manager** dialog box appears, and you can turn off the computer from the **Shut Down** menu.



Pressing the **Ctrl+Alt+Delete** keys simultaneously or turning off the computer with the power button may result in data loss in files that are currently open.

Why won't the power management respond?

Your computer's operating system may become unstable if a lower power state, such as Hibernate, is initiated and changed before the computer completely enters the lower power state.


To restore the computer to its normal operating stability

- 1 Close all open programs.
- 2 Restart the computer by pressing **Ctrl+Alt+Delete** simultaneously. The **Windows Task Manager** dialog box appears, and you can restart the computer from the **Shut Down** menu.
- 3 If this procedure does not work, press and hold the power button for four seconds or longer to turn off the computer.

Why is the sound of my computer's fan so loud?

Use the PowerPanel™ utility to change the Thermal Control Strategy setting to Quiet. This setting slows down the CPU speed. See PowerPanel Help for more information.

To reduce fan noise

- 1 Right-click the **CPU** icon  on the taskbar, and select **Edit/Create Profiles**. The AC Power Profile Editor window appears.
- 2 Double-click **System** to open the file if it isn't already opened.
- 3 Double-click **Thermal Control Strategy - Performance**, and select **Quiet**.
- 4 Restart your computer.

Why does the System Properties dialog box display a slower CPU speed than advertised?

This is normal. Because your computer's CPU utilizes a type of CPU speed controlling technology for power conservation purposes, System Properties may display the CPU's current speed instead of the maximum speed.

Troubleshooting Batteries

How do I know when the battery is charged?

To determine the remaining battery charge, see “Displaying Battery Information” in the online VAIO® Computer User Guide for more information.

When is the computer using AC power?

When the computer is directly connected to the AC adapter, it uses AC power, even if a battery is installed.

When should I recharge the battery?

- When the battery level falls below 10 percent.
- When both the battery and power indicators blink.
- When you have not used the battery for a considerable amount of time.

Can my computer enter Hibernate mode while using battery power?

For some software programs and some peripheral devices, your computer may not enter Hibernate mode when the battery life is low. To avoid loss of data when using battery power, you should save your data frequently and manually activate a power management mode, such as Standby or Hibernate.

When should I replace the battery?

If, after fully charging the battery, the battery power is still low, the battery may be reaching the end of its life and should be replaced.

Why is the battery warm?

While the battery is in use or being discharged, the battery heats up. This is normal and is not cause for concern.

Troubleshooting the Printer

Why can't I print a document?



- ❑ Make sure the printer is turned on, and the printer cable is securely connected to the ports on your printer and computer.
- ❑ Make sure the printer is compatible with the Microsoft® Windows® operating system installed on your computer.
- ❑ You may need to install the printer software drivers before you use the printer. See the instructions that came with your printer for information about installing these drivers.
- ❑ If the printer is not functioning after the computer resumes from a power saving mode (Standby or Hibernate), reset the printer connection.
 - 1 Click **Start**, and click **Control Panel**.
 - 2 Click **Printers and Other Hardware**, and click **Printers and Faxes**.
 - 3 Right-click the printer icon that is not functioning, and select **Properties** to open the **Properties** window.
 - 4 Click **OK**.
- ❑ Change the default printer port setting, although this setting is generally correct for most printers.
 - 1 Click **Start**, and click **Control Panel**.
 - 2 Click **Performance and Maintenance**, and click **System**. The **System Properties** dialog box appears.
 - 3 Select the **Hardware** tab, and click **Device Manager**. The **Device Manager** window appears.
 - 4 Double-click **Ports (COM&LPT)**, and double-click **ECP Printer Port (LPT1)**.
 - 5 Select the **Port Settings** tab, and select a different **LPT Port Number**.

Troubleshooting the Mouse and Touchpad


Why doesn't the computer recognize the USB mouse?

- ❑ Make sure the mouse is securely plugged into the USB port. See “Connecting a Mouse or Keyboard” for more information.
- ❑ You may need to install or reinstall the mouse driver software. Use the supplied Application Recovery CD to install the drivers. See “Using the Application Recovery CD(s)” for more information.

Why doesn't the pointer move when I use the USB mouse?


- ❑ Make sure another mouse was not installed.
- ❑ You may need to install or reinstall the mouse driver software. Use the supplied Application Recovery CD(s). See “Using the Application Recovery CD(s)” for more information.
- ❑ If you are playing a disc, press the **Ctrl+Alt+Delete** keys simultaneously to stop playback and restart the computer.
- ❑ If you still cannot use the pointer, turn off and restart the computer. You can turn off the computer three different ways.
 - 1 Press the **Windows** key , and press **U**. When the **Turn off computer** window opens, press **R**.
 - 2 Press the **Ctrl+Alt+Delete** keys simultaneously. When the **Windows Task Manager** window appears, press the **Alt** key to highlight the menu bar, and press the **Right Arrow**  key to select **Shut Down**. Press **Enter**, and then press **R**.
 - 3 Press and hold the power button for more than four seconds.

Why doesn't the touchpad work?

- ❑ You may have disabled the touchpad without connecting a mouse to the computer. See “Customizing the touchpad” for more information.
- ❑ Restart the computer to activate the touchpad again.
- ❑ If your touchpad is interpreting a single tap as a double-click, adjust the button assignments. Follow these steps:
 - 1 Press the **Windows** key . The **Start** menu appears.

- 2 Press the **Up Arrow** key **↑** to select **All Programs**, and press **Enter**.
 - 3 Press the **Up Arrow** key **↑** to select **Sony Notebook Setup**, and press **Enter**. A submenu appears with **Sony Notebook Setup** preselected.
 - 4 Press **Enter**. The **Sony Notebook Setup** dialog box appears.
 - 5 Press the **Right Arrow** key **→** to select the **Touchpad** tab, and press **Alt+S** simultaneously. The **Mouse Properties** dialog box appears.
 - 6 Make sure the **Buttons** tab is open, and press the **Up** **↑** and **Down Arrow** **↓** keys to change the button assignments. Press the **Tab** key to move between drop-down menus.
 - 7 Press **Enter** to save your changes and close the dialog box.
- ❑ If you are still experiencing problems, make sure another mouse was not installed.
 - ❑ You may need to use your Application Recovery CD(s) to reinstall the mouse drivers. See “Using the Application Recovery CD(s)” for more information.

Why doesn't the pointer move when I use the touchpad?

- ❑ Try restarting your computer. Follow these steps:
 - 1 Press the **Windows** key .
 - 2 Press **U**. The **Turn off computer** window opens.
 - 3 Press **R** to restart the computer.
- ❑ If the computer does not restart,
 - 1 Press **Ctrl+Alt+Delete** simultaneously. The **Windows Task Manager** window appears.
 - 2 Press **Alt** to highlight the menu bar, and press the **Right Arrow** key **→** to select **Shut Down**.
 - 3 Press **Enter**.
 - 4 Press **R** to restart the computer.
- ❑ If you still cannot restart your computer, press and hold the power button for more than four seconds to turn off the computer.

- ❑ If the pointer does not move while playing a disc, press **Ctrl+Alt+Delete** simultaneously to stop playback and restart the computer.
- ❑ You may need to use your supplied Application Recovery CD(s) to reinstall the touchpad or mouse drivers. See “Using the Application Recovery CD(s)” for more information.

Troubleshooting the Modem

Why doesn't my modem work?

- ❑ Make sure the telephone cable is plugged into the computer and the wall jack. See “To connect a telephone cable” for more information.
- ❑ Make sure the telephone cable is working by plugging the cable into an ordinary telephone and listening for a dial tone.
- ❑ Make sure the telephone number the program is dialing is correct.
- ❑ Make sure the software you are using is compatible with the computer's modem. (All preinstalled Sony programs are compatible.)
- ❑ If you are still experiencing problems, use the supplied Application Recovery CD(s) to reinstall the modem drivers. See “Using the Application Recovery CD(s)” for more information.

Why is my modem connection slow?

Your computer is equipped with a V.90 compatible modem. Many factors may influence modem connection speed, including telephone line noise or compatibility with telephone equipment, such as fax machines or other modems. If you think your modem is not connecting properly to other PC-based modems, fax machines, or your Internet Service Provider (ISP), follow these steps:

- ❑ Ask your telephone company to verify your telephone line is free of any line noise.
- ❑ If your problem is fax-related, make sure there are no problems with the fax machine you are calling and that it is compatible with fax modems.
- ❑ If you are having a problem connecting with your ISP, make sure the ISP is not experiencing technical problems.
- ❑ If you have a second telephone cable available, try connecting the modem to that cable.

Troubleshooting Networks

Why can't my computer connect to a Wireless LAN Access Point?

- ❑ Connection availability is affected by distance and obstructions. You may need to move your computer away from obstructions or closer to any access point you may be using.
- ❑ Make sure the Wireless LAN switch on the computer is in the ON position or the Wireless LAN PC Card is properly inserted.
- ❑ Make sure power to the access point is on.
- ❑ Make sure the access point is displayed in the **Available networks** window.
 - 1 From the **Start** menu, click **Control Panel, Network and Internet Connections**, and then **Network Connections**.
 - 2 Right-click **Wireless Network Connection**, and select **Properties**. The **Wireless Network Connection Properties** dialog box appears.
 - 3 Select the **Wireless Networks** tab, and make sure the access point is displayed in the **Available networks** box. If it is not displayed, see “To connect to an existing wireless network” for more information.
- ❑ Make sure the encryption key is correct.

Why can't I access the Internet?

- ❑ Make sure the Wireless LAN PC Card is properly inserted into the PC Card slot.
- ❑ Check the access point settings. Refer to the instructions supplied with the access point.
- ❑ Make sure your computer and the access point are connected to one another.
- ❑ Move your computer away from obstructions or closer to any access point you may be using.
- ❑ Make sure your computer is properly configured for Internet access.

Why is the data transfer speed slow?

- ❑ The Wireless LAN data transfer speed is affected by distance and obstructions between devices and access points. Other factors include device configurations, radio conditions, and software compatibility. To maximize

the data transfer speed, move your computer away from obstructions or closer to any access point you may be using.

- ❑ If you are using a Wireless LAN Access Point, the device may be temporarily overloaded depending on the number of other devices communicating via the access point.
- ❑ If your access point interferes with other access points, change the access point channel. See your access point instructions for more information.

Why is the communication speed interrupted or slowed down when MPEG2 data is transferred?

The typical effective data transfer speed via an access point is 4-5 Mbps when adhering to the IEEE 802.11b standard. High-rate stream transfers with MPEG2 data may lower this rate.

How do I avoid data transfer interruptions?

- ❑ Data transfer interruptions may occur with large files or use of microwaves and cordless telephones when connected to an access point.
- ❑ Move the computer closer to the access point.
- ❑ Make sure the access point connection is intact.
 - 1 From the **Start** menu, click **Control Panel, Network and Internet Connections**. The **Network and Internet Connections** window appears.
 - 2 Click **Network Connections**. The **Network Connections** window appears.
 - 3 Check the connection status.
- ❑ Change the access point channel. See your access point instructions for more information.

Can I connect to an IEEE 802.11a device?

Your computer's wireless capabilities support the IEEE 802.11b standard only. Devices connecting to a Wireless LAN using the IEEE 802.11a standard cannot connect to devices using the IEEE 802.11b standard.

What are channels?

Wireless LAN communication occurs on divided frequency bands known as channels. Third-party Wireless LAN Access Point channels may be preset to different channels from Sony devices.

If you are using a Wireless LAN Access Point, refer to connectivity information contained in your access point instructions.

Why can't I establish a connection between two VAIO computers?

- ❑ Your computer may not recognize an i.LINK^{*} connection if the i.LINK cable is not plugged securely into the i.LINK ports. Disconnect the i.LINK cable and securely reconnect it to both computers. If neither computer responds after a few moments, restart both computers.
- ❑ If the computers do not recognize the i.LINK connection after resuming from a power saving mode (Standby or Hibernate), restart both computers.

* i.LINK is a trademark of Sony used only to designate that a product contains an IEEE 1394 connection. The i.LINK connection may vary, depending on the software applications, operating system, and compatible i.LINK devices. All products with an i.LINK connection may not communicate with each other. Refer to the documentation that came with your compatible i.LINK device for information on operating conditions and proper connection. Before connecting compatible i.LINK PC peripherals to your system, such as CD-RW or hard disk drive, confirm their operating system compatibility and required operating conditions.

Troubleshooting DVDs and CDs

How do I maintain DVDs?

- ❑ Avoid touching the surface of the disc with your fingers. Fingerprints and dust on the surface of the disc may cause reading errors.
- ❑ To clean the disc, hold the edge of the disc, and use a soft cloth to wipe the surface from the center out. If the disc is badly soiled, moisten a soft cloth with water, wring it out well, and use it to wipe the surface of the disc from the center out. Wipe off any remaining moisture with a dry, soft cloth.
- ❑ Do not clean the disc with solvents (such as benzine, thinner, commercially available cleaners, or anti-static spray), which may damage the disc.
- ❑ Do not drop or bend the disc.

Why does my computer freeze when I try to read a disc?

The disc your computer is trying to read may be dirty or damaged. Restart the computer, and eject the disc from the optical drive. Examine the disc for dirt or damage. If the disc is dirty, see “How do I maintain CDs and DVDs?” for instructions on how to clean it.

Why won't the optical drive tray open?

- ❑ Make sure the computer is turned on.
- ❑ Press the Eject button on the optical drive.
- ❑ If the Eject button does not work, open the tray by inserting a thin, straight object (such as a paper clip) in the hole to the right of the Eject button.

Why isn't the optical drive playing my CD or DVD properly.

- ❑ Make sure the disc label is facing up.
- ❑ If the disc requires software, make sure the software is installed according to the manufacturer's instructions.
- ❑ A dirty or damaged disc may cause the computer to stop responding while it tries to read the disc. If necessary, restart the computer, remove the disc, and check the disc for dirt or damage.
- ❑ If you see video but cannot hear audio, follow these steps:
 - ❑ Make sure your optical drive does not have the mute setting enabled.

- ❑ Check the volume setting in the audio mixer.
- ❑ If you are using external speakers, check the volume settings, and then check the connections between your external speakers and the computer.
- ❑ Click **Start** on the taskbar, and then **Control Panel, Performance and Maintenance**, and **System**. Select the **Hardware** tab, and click **Device Manager**. Make sure the correct drivers are properly installed.
- ❑ Do not use adhesive labels to identify the CD. The label may come off while the disc is in use in the optical drive and cause the drive to malfunction.
- ❑ If a region code warning appears when you try to use your optical drive, it may be that the DVD you are trying to play is incompatible with the optical drive. Verify the region code listed on the DVD package.
- ❑ Condensation may cause the computer to malfunction. If this occurs, do not use it for at least one hour.
- ❑ Make sure the digital CD audio is enabled for your optical drive. Follow these steps:
 - 1 Click **Start** on the taskbar, and then **Control Panel, Performance and Maintenance**, and **System**. The **System Properties** window opens.
 - 2 Select the **Hardware** tab, and then click **Device Manager**. The **Device Manager** window appears.
 - 3 Double-click the listed DVD/CD-ROM drive. The **Properties** window opens.
 - 4 Click the **Properties** tab, and then select the **Enable digital CD audio for this CD-ROM device** check box.

Why did the computer (LCD) screen go blank?

- ❑ Your computer screen may go blank if the computer has lost power or is in a power saving mode (Standby or Hibernate).
 - ❑ Make sure the computer is plugged into a power source and is turned on. The power indicator on the computer will be on if the computer is on.
 - ❑ Make sure the battery is inserted properly and is charged.
 - ❑ If the computer is in LCD (Video) Standby mode, press any key to activate the computer screen.

- ❑ If the display mode is set to external display (such as TV), press and hold the **Fn** key while you press **F7** several times.

Why don't my changes appear on the computer (LCD) screen?

You may need to refresh the computer screen. Press the Windows key and press the **D** key twice.

Troubleshooting i.LINK Drives

Why isn't my i.LINK drive playing a CD or DVD properly?

The i.LINK optical drive will not play a CD or DVD if the disc was inserted with the label facing down. Eject the CD or DVD from the drive, and make sure the label is facing up. The disc will also not play properly under the following circumstances:

- ❑ The disc requires a particular software that is not already installed on your computer. Install that software according to the manufacturer's instructions.
- ❑ The DVD is not compatible with the optical drive and a region code warning appears when you try to play it. Make sure the region code listed on the DVD package is compatible with the drive.

Why won't my i.LINK drive play my computer programs?

If multiple i.LINK®* devices are connected to the computer, the software supplied with your computer will not recognize them. Turn off your computer and all connected devices. Disconnect the devices that are not in use. See "i.LINK optical (disc) drives" for instructions on reconnecting the i.LINK device.

* i.LINK is a trademark of Sony used only to designate that a product contains an IEEE 1394 connection. The i.LINK connection may vary, depending on the software applications, operating system, and compatible i.LINK devices. All products with an i.LINK connection may not communicate with each other. Refer to the documentation that came with your compatible i.LINK device for information on operating conditions and proper connection. Before connecting compatible i.LINK PC peripherals to your system, such as CD-RW or hard disk drive, confirm their operating system compatibility and required operating conditions.

Troubleshooting Floppy Disk Drives

Why doesn't the Safety Remove Hardware icon appear on the taskbar when the drive is connected?

The computer does not recognize that the floppy disk drive is connected to the computer. First, make sure the USB connector is properly inserted into the USB port. If you need to secure the connection, wait a few moments for the computer to recognize the drive. If the icon still does not appear, follow these steps:

- 1 Close all open programs to avoid data loss.
- 2 Eject the floppy disk from the floppy disk drive. See “Inserting and removing floppy disks” for more information.
- 3 Reconnect the floppy disk drive. See “Connecting a floppy disk drive” for more information.
- 4 Restart the computer.

Why is the drive unable to write data to a floppy disk?

The floppy disk drive cannot write data to a disk if it is inserted into the drive improperly. See “Inserting and removing floppy disks” for instructions on how to insert the disk properly.

If the disk is inserted properly and you are still unable to write data to it, the disk may be write-protected. You can either use a floppy disk that is not write-protected or disable the write-protect feature.

Troubleshooting PC Cards

Why doesn't my PC Card work?

- Make sure the PC Card is inserted properly. See “Inserting PC Cards” for more information.
- Make sure the PC Card is compatible with the Microsoft® Windows® operating system installed on your computer.
- Make sure any necessary drivers were installed properly.

Why doesn't my computer recognize attached devices?

For some PC Cards, if you alternate between normal power operation and the Standby or Hibernate modes while the card is inserted into the PC Card slot, the computer may not recognize the PC Card or the connected device. Restart your computer.

Why can't I insert my PC Card?

- Make sure you are orienting the card correctly. See “Inserting PC Cards” for more information.
- Check the manual that came with your PC Card for more information on its use.
- You may not be able to use some PC Cards or some functions of the PC Card with this computer.

Why does an exclamation mark (!) appear on the Device Manager tab in the System Properties dialog box?

You may not be using the most recent software driver provided by the PC Card manufacturer. Make sure the necessary drivers are installed. You may need to remove the software driver, and reinstall it.

Troubleshooting Audio-Video Connections

Why can't I use the DV recorder?

You may not be able to use the DV recorder and the message, **DV equipment seems to be disconnected or turned off** may appear for the following reasons:

- ❑ The DV recorder was not connected properly. See “Connecting an i.LINK digital video recorder” for more information.
- ❑ The i.LINK cable connectors are not plugged securely into the ports on the computer and the camera. Unplug the connectors, and plug them in again.

Why won't my speakers work?


- ❑ Make sure the speakers are properly connected and the volume is turned up loud enough to hear sound.
- ❑ Your speakers may not be designed for computer use.
- ❑ If the speakers have a mute button, set the button to off.
- ❑ If you are using battery power, make sure the battery is inserted properly and is charged.
- ❑ If you have connected an audio cable to the Headphone jack, disconnect the cable and use the speaker cable that was supplied with the speakers.
- ❑ Use the Application Recovery CD(s) to reinstall the drivers. See “Using the Application Recovery CD(s)” for more information.

Why can't I hear sound from my speakers?

- ❑ If you are using battery power, make sure the battery is properly inserted and is charged.
- ❑ If you are using an application that has its own volume control, make sure the volume control is properly set.
- ❑ Your speakers may be set to mute, the volume setting may be too low, or the audio option may be disabled. See “Adjusting the volume” and “Enabling the audio feature” for more information.

Why don't the Fn+F3 or the Fn+F4 key combinations work?


The computer may not recognize the **Fn+F3** and **Fn+F4** key combinations if the correct speakers are not selected. Follow these steps:

- 1 Right-click the **Volume** icon  on the taskbar, and select **Adjust Audio Properties**.
- 2 Select the **Audio** tab, and click **Advanced** in the **Sound Playback** box. The **Advanced Audio Properties** window appears.
- 3 Click the **Speakers** tab, if it is not already selected.
- 4 Select the correct stereo speakers from the **Speaker setup** drop-down list.

Why do I hear noise distortion while listening to music with speakers or headphones?


You may experience noise distortion while listening to music with speakers or headphones if the CPU control is set to Automatic Profile Selection. Use the preinstalled PowerPanel™ software to set the CPU control to Performance or Battery Life. If you use a memory-intensive application, set the CPU to Performance.*

To change the CPU control

- 1 Right-click the **CPU** icon  on the Windows® taskbar, and click **Edit/Create Profiles**. The **Profile Editor** window appears.
- 2 In the left panel, click the power management profile that you want to set. Maximum Battery Life is the default selection when your computer is running on battery power.
- 3 In the right panel, double-click either **CPU Control (Plugged in)** or **CPU Control (Running on batteries)**, depending on the power source you are using. A menu of CPU Control options appears.
- 4 Select an option. If you use a memory-intensive application, set the CPU control to **Performance**.
- 5 Click the **File** menu, and select **Save**.
- 6 Close the **Profile Editor** window.

* Applicable to models with a Crusoe™ processor.

Why doesn't my microphone work?

If you are using an external microphone, make sure the microphone is properly plugged into the Microphone jack  on the computer. See “Connecting a microphone” for more information.

Troubleshooting the LCD screen

Why did the computer (LCD) screen go blank?

- ❑ Your computer screen may go blank if the computer has lost power or is in a power saving mode (Standby or Hibernate).
 - ❑ Make sure the computer is plugged into a power source and is turned on. The power indicator on the computer will be on if the computer is on.
 - ❑ Make sure the battery is inserted properly and is charged.
 - ❑ If the computer is in LCD (Video) Standby mode, press any key to activate the computer screen.
- ❑ If the display mode is set to external display (such as TV), press and hold the **Fn** key while you press **F7** several times.

Why don't my changes appear on the computer (LCD) screen?

You may need to refresh the computer screen. Press the Windows key and press the **D** key twice.

Troubleshooting Memory Stick Media

Why can't I open my image files?

Copy the data from the Memory Stick media onto your computer's hard disk, and then format the Memory Stick media using Memory Stick Formatter software preinstalled on your computer.

Why can't I save music files onto my Memory Stick media?

- Only MagicGate Memory Stick media can be used with copyright protected data such as music.
- Copyright protected music cannot be checked-out to any Memory Stick media other than MG Memory Stick media.
- Recorded music is limited to private use only. Using recorded music for any other purpose requires permission of the copyright holders.
- Sony is not responsible for music files that cannot be recorded from a CD or downloaded from other sources.

Can I copy images from a digital video camera using Memory Stick media?

Yes, and you can view video clips that you have recorded with Memory Stick media-compatible video camera recorders.

How do I prevent damage to the Memory Stick media?

- Do not use the media in locations that are subject to static electricity or electrical noise.
- Do not touch the media connector with your finger or metallic objects.
- Do not attach labels other than the supplied label to a media.
- Do not bend, drop, or apply strong shock to the media.
- Do not disassemble or modify the media.
- Do not allow the media to get wet.

How do I extend the life of the Memory Stick media?

- Use the supplied storage case. See the instructions that came with your media for more information on its use.
- Do not use or store the media in a location that is subject to:

- ❑ Extremely high temperatures, such as in a car parked in the sun
- ❑ Direct sunlight
- ❑ High humidity or places with corrosive substances

Troubleshooting Software

What do I do when my program stops responding or crashes?

Contact the software publisher or designated provider for technical support. See “Software Support Information” or contact information.

Why does the message, “You must insert the Application CD into your optical drive” appear, and the software does not start?

- Some titles require specific files that are located on the Application Recovery CD. Insert the disc, and try starting the program again.
- Your optical drive may not be reading the disc.
- Make sure you place the CD in the tray with the label side facing up.
- Make sure the optical drive is properly connected to your computer. See “Connecting External Optical (Disc) Drives” for more information.

Why can't the program find a file while a PC Card is inserted?

When inserted into a computer that is connected to the docking station, some PC Cards may change the drive letters of the disk drives in the docking station. If this occurs, a program you are using may not find files. Do one of the following:

- Remove the PC Card, and restart your computer. Do not insert the PC Card while using that program.
- Change the drive letters of the disk drives of the docking station or the PC Card disk drives. See the Windows® help files or the program guide to change the drive letters.

What software do I use for CD-R/CD-RW software functions?

Sony recommends using the preinstalled SonicStage software and Windows® XP to create CDs on your VAIO® computer, if the specific model you purchased is preconfigured with all of the necessary components for CD-R and CD-RW capability.

Downloading the optional RealJukebox CD-burning component to create CDs on your computer may interfere with normal system operations.

Why can't I use the DVgate software?

If your computer is using the Ultimate Battery Life profile as a power saving mode, you cannot use DVgate™ software. Please select another profile. Preferably, connect your computer to AC power when using these features.

Software Support Information

Adobe® Acrobat® Reader®, Photoshop® Elements, Premiere® LE (Adobe Systems Inc.)

Web site	http://www.adobe.com/
e-mail	techdocs@adobe.com
phone	206-675-6126 (fee-based support)
fax	206-628-5737
hours	M-F, 6 AM-5 PM (PST)

America Online® (America Online, Inc.)

Web site	http://www.aol.com/
phone	800-827-6364
hours	7 days a week, 24 hours a day

EarthLink Network Total Access® (EarthLink, Inc.)

Web site	http://support.earthlink.net/
e-mail	support@earthlink.net
phone	800-890-5128 or 800-890-6356
hours	7 days a week, 24 hours a day

PC-Cillin® 2000 (Trend Micro, Inc.)

Web site	http://www.antivirus.com/pc-cillin/support/
phone	510-859-0308; 900-820-8324*
hours	M-F, 8 AM-5 PM (PST)

* Support from 510-859-0308 is free of charge, but subject to delays. Support from 900-820-8324 is fee-based, but offers immediate response.

Quicken® (Intuit Inc.)

Web site	http://www.intuit.com/support
phone	900-555-4932; 800-644-3193*
hours	M-F, 5 AM-5 PM (PST)

* Support from 900-555-4932 is fee-based. Support from 800-644-3193 is automated and free of charge.

QuickTime® (Apple Computer, Inc.)

Web site	http://www.apple.com
phone	800-275-2273
hours	M-F, 6 AM-6 PM (PST)

RealJukebox®, RealPlayer® (RealNetworks, Inc.)

Web site	http://service.real.com/rjoptions.html
e-mail	http://service.real.com/help/call.html (online email form)

Sony Applications (Sony Electronics Inc.)

Web site	http://www.sony.com/pcsupport
phone	888-4-SONY-PC (888-476-6972)*
hours	7 days a week, 24 hours a day

* Support from 1-888-4-SONY-PC is free of charge for 90 days after the original date of purchase.

Windows® Operating System, Word (Microsoft Corp.)

Web site	http://www.sony.com/pcsupport
phone	888-4SONYPC (888-476-6972)*
hours	7 days a week, 24 hours a day

* Support from 1-888-4-SONY-PC is free of charge for 90 days after the original date of purchase.

WinDVD® (InterVideo, Inc.)

Web site	http://www.intervideo.com
phone	510-651-0888

Sony Service Center

For the Sony Service Center nearest you, call 1-888-4-SONY-PC (1-888-476-6972) or find Sony Customer Service on the Web at <http://www.sony.com/pcsupport>.

Computer Support Information

If you have questions about your computer or the preinstalled software, refer to the following sources for answers in the sequence listed below.

1 VAIO® Computer User Guide

The online VAIO® Computer User Guide and the printed VAIO® Computer Quick Start provide information on how to maximize your computer capabilities and solve common problems.

2 Software Manuals and Online Help Files

The software preinstalled on your computer may come with an online manual. These manuals are stored on the hard disk drive as online Help files. You can find the Help files from the Help menu under the specific software application. Some software programs may come with a printed manual.

3 Operating System Online Support

Your computer comes preinstalled with Microsoft® Windows®. For operating system support, you can access Microsoft® customer support at: <http://support.microsoft.com/directory/>.

4 VAIO Support Agent

You can find VAIO Support Agent by clicking Start and selecting Help and Support. Using advanced diagnostic technology, Sony's VAIO Support Agent runs scheduled protections of your programs, network settings, and other important software settings. When your software is protected, you can use VAIO Support Agent to repair software problems by restoring your software to any of the previously protected states.

5 Sony Computing Support

This service provides instant access to information on commonly encountered problems. Enter a description of your problem and the Knowledge Database searches for the corresponding solutions online. You can access Sony Computing Support at: <http://www.sony.com/pcsupport>.

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