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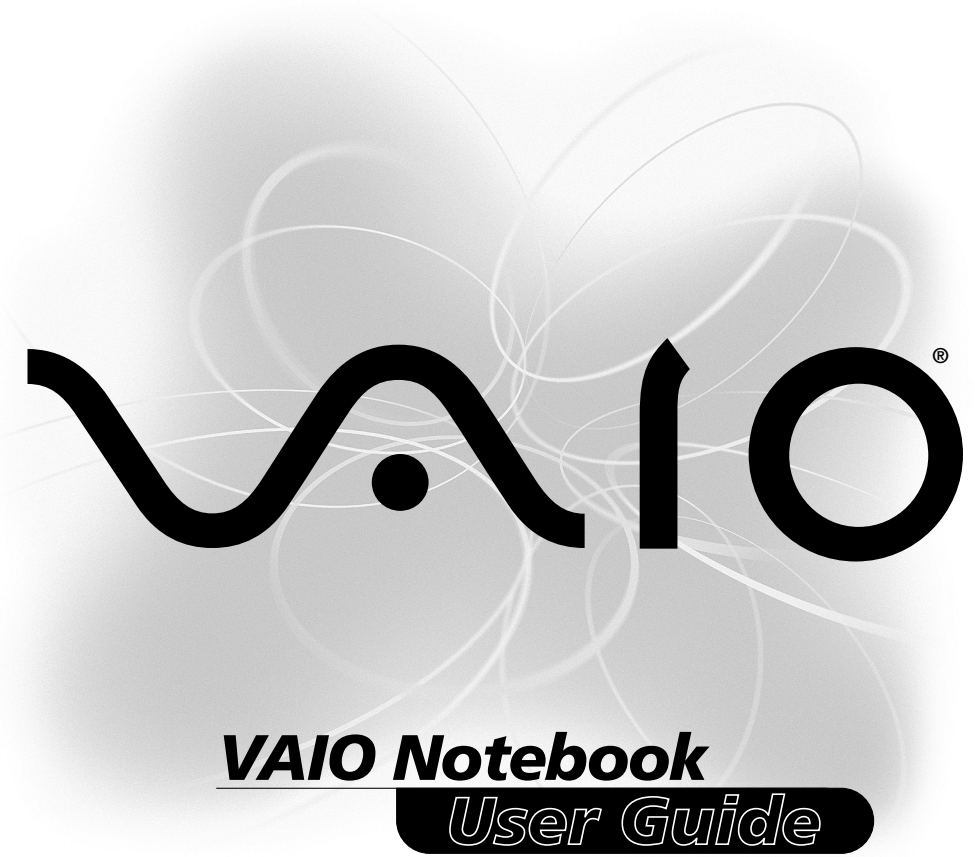

VAIO Notebook
User Guide

PCG-F610
PCG-F630

Printed in USA
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4-650-597-11
www.sony.com

SONY

VAIO® Notebook User Guide

PCG-F610/F630

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Owner's Record

The model number and serial number are located on the bottom of your Sony VAIO® Notebook. Record the serial number in the space provided here. Refer to the model and serial number when you call your Sony Service Center.

Model Number: PCG-9401, PCG-9411

Serial Number:_____

Safety Information

WARNING

- ❏ To prevent fire or shock hazard, do not expose your notebook computer to rain or moisture.
- ❏ To avoid electrical shock, do not open the cabinet. Refer servicing to qualified personnel only.
- ❏ Never install modem or telephone wiring during a lightning storm.
- ❏ Never install telephone jacks in wet locations unless the jack is specifically designed for wet locations.
- ❏ Never touch uninsulated telephone wire or terminals unless the telephone line has been disconnected at the network interface.
- ❏ Use caution when installing or modifying telephone lines.
- ❏ Avoid using the modem during an electrical storm.
- ❏ Do not use the modem or a telephone to report a gas leak in the vicinity of the leak.
- ❏ A socket outlet should be as close as possible to the unit and easily accessible.

! **To change the backup battery, please contact your nearest Sony Service Center.**

! **Caution - The use of optical instruments with this product will increase eye hazard. As the laser beam used in this product is harmful to the eyes, do not attempt to disassemble the cabinet. Refer servicing to qualified personnel only.**

! **For DVD-ROM: Danger - Visible and invisible laser radiation when open. Avoid direct exposure to beam.**

! **For CD-ROM: The use of optical instruments with the CD-ROM drive will increase eye hazard.**

! **Caution: To reduce the risk of fire, use only No. 26 AWG or larger telecommunication line cord.**

! **Pour changer la pile de rechange, veuillez contacter votre centre de service Sony le plus près.**

! **Avertissement - L'utilisation d'instruments optiques avec ce produit augmente les risques pour les yeux. Puisque le faisceau laser utilisé dans ce produit est dommageable pour les yeux, ne tentez pas de désassembler le boîtier. Adressez-vous à un agent de service qualifié.**

! **Danger : Radiation laser visible et invisible si ouvert. Évitez l'exposition directe au faisceau.**

! **Pour changer la pile de rechange, veuillez contacter votre centre de service Sony le plus près.**

! **Attention : Afin de réduire les risques d'incendie, n'utilisez qu'un cordon de communication N0. 26 AWG ou plus gros.**

! **Pour le CD-ROM: L'utilisation d'instruments optiques avec les lecteurs CD-ROM augmente les risques pour les yeux.**

AVERTISSEMENT

- ❏ Pour prévenir tout risque d'incendie ou d'électrocution, garder cet appareil à l'abri de la pluie et de l'humidité.
- ❏ Pour prévenir tout risque d'électrocution, ne pas ouvrir le châssis de cet appareil et ne confier son entretien qu'à une personne qualifiée.
- ❏ Ne jamais effectuer l'installation de fil modem ou téléphone durant un orage électrique.
- ❏ Ne jamais effectuer l'installation d'une prise téléphonique dans un endroit mouillé à moins que la prise soit conçue à cet effet.
- ❏ Ne jamais toucher un fil téléphonique à découvert ou un terminal à moins que la ligne téléphonique n'ait été débranché de l'interface réseau.
- ❏ Soyez très prudent lorsque vous installez ou modifiez les lignes téléphoniques.
- ❏ Évitez d'utiliser le modem durant un orage électrique.
- ❏ N'utilisez pas le modem ni le téléphone pour prévenir d'une fuite de gas si vous êtes près de la fuite.
- ❏ L'appareil doit être le plus près possible d'une prise murale pour en faciliter l'accès.

For questions regarding your product or for the Sony Service Center nearest you, call 1-888-476-6972 in the United States or 1-800-961-7669 in Canada. Sony Customer Support can be reached at www.sony.com/pcsupport

The number below is for FCC related matters only.

Regulatory Information

Declaration of Conformity

Trade Name:	SONY
Model No.:	PCG-9401, PCG-9411
Responsible Party:	Sony Electronics Inc.
Address:	1 Sony Drive Park Ridge, NJ 07656
Telephone:	201-930-6972

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and

(2) this device must accept any interference received, including interference that may cause undesired operation.

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

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

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

Only peripherals (computer input/output devices, terminals, printers, etc.) that comply with FCC Class B limits may be attached to this computer product. Operation with non-compliant peripherals is likely to result in interference to radio and television reception.

All cables used to connect peripherals must be shielded and grounded. Operation with cables, connected to peripherals, that are not shielded and grounded, may result in interference to radio and television reception.

FCC Part 68

This equipment complies with Part 68 of the FCC rules. On the bottom of this equipment is a label that contains, among other information, the FCC equivalence number (REN) for this equipment. If requested, this information must be provided to the telephone company.

This modem uses the USOC RJ-11 telephone jack.

The REN is used to determine the quantity of devices which may be connected to the telephone line. Excessive RENs on the telephone line may result in the devices not ringing in response to an incoming call. In most, but not all areas, the sum of the RENs should not exceed five (5.0). To be certain of the number of devices that may be connected to the line, as determined by the total RENs, contact the telephone company to determine the maximum REN for the calling area.

If the terminal equipment causes harm to the telephone network, the telephone company will notify you in advance that temporary discontinuance of service may be required. But if advance notice is not practical, the telephone company will notify the customer as soon as possible. Also, you will be advised of your right to file a complaint with the FCC if you believe it is necessary.

The telephone company may make changes in its facilities, equipment, operations or procedures that could affect the operations of the equipment. If this happens, the telephone company will provide advance notice in order for you to make the necessary modifications in order to maintain uninterrupted service.

If trouble is experienced with this equipment, please contact 1-888-4SONYPC (1-888-476-6972), or write to the Sony Customer Information Center, One Sony Drive, Park Ridge, NJ 07656, for repair and / or warranty information. If the trouble is causing harm to the telephone network, the telephone company may request that you remove the equipment from the network until the problem is resolved.

Repair of this equipment should be made only by a Sony Service Center or Sony authorized agent. For the Sony Service Center nearest you, call 1-888-4SONYPC (1-888-476-6972).

This equipment cannot be used on public coin service provided by the telephone company. Connection to Party Line Service is subject to state and possible provincial tariffs. (Contact the state or provincial utility service commission, public service commission, or corporation commission, for information.)

Telephone Consumer Protection Act of 1991 (United States)

The Telephone Consumer Protection Act of 1991 makes it unlawful for any person to use a computer or other electronic device to send any message via a telephone facsimile machine unless such message clearly contains, in a margin at the top or bottom of each transmitted page or on the first page of the transmission, the date and time it is sent and an identification of the business, other entity, or individual sending the message, and the telephone number of the sending machine or such business, other entity, or individual.

In order to program this information into your facsimile machine, see your fax software documentation.

Telephone Consumer Guidelines (Canada)

Please refer to your telephone directory under 'Privacy Issues' and/or 'Terms of Service.' For more detailed information, please contact:

CRTC
Terrasses de la Chaudiére, Tour centrale
1 promenade du Portage, 5 étage Hull PQ K1A 0N2.

This Class B digital apparatus complies with Canadian ICES-003.

Cet àppareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

DISPOSAL OF LITHIUM ION BATTERY

You can return your unwanted lithium ion batteries to your nearest Sony Service Center or Factory Service Center.

In some areas the disposal of lithium ion batteries in household or business trash may be prohibited.

For the Sony Service Center nearest you, call 1-888-476-6972 in the United States or 1-800-961-7669 in Canada.

- **! Do not handle damaged or leaking lithium ion batteries.**
- **! Ne pas manipuler les batteries au lithium-ion qui fuient ou sont endommagées.**

- **! Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Discard used batteries according to the manufacturer's instructions.**
- **! Une batterie non conforme présente un danger d'explosion. La remplacer seulement par une batterie identique ou de type équivalent recommandé par le fabricant. Évacuer les batteries usées selon les directives du fabricant.**

- **! The battery pack used in this device may present a fire or chemical burn hazard if mistreated. Do not disassemble, heat above 212°F (100°C) or incinerate.**
  Dispose of used battery promptly. Keep away from children.
- **! La manutention incorrecte du module de batterie de cet appareil présente un risque d'incendie ou de brûlures chimiques. Ne pas démonter, incinérer ou exposer à une température de plus de 100°C. Évacuer promptement la batterie usée. Garder hors de portée des enfants.**

INDUSTRY CANADA NOTICE

NOTICE: The Industry Canada label identifies certified equipment. This certification means that the equipment meets certain telecommunications network protective, operational and safety requirements as prescribed in the appropriate Terminal Equipment Technical Requirements document(s). The Department does not guarantee the equipment will operate to the user's satisfaction.

Before installing this equipment, users should ensure that it is permissible to be connected to the facilities of the local telecommunications company. The equipment must also be installed using an acceptable method of connection.

The customer should be aware that compliance with the above conditions may not prevent degradation of service in some situations.

Repairs to certified equipment should be coordinated by a representative designated by the supplier. Equipment malfunctions or any repairs or alterations made by the user to this equipment may give the telecommunications company cause to request that the user disconnect the equipment.

Users should ensure for their own protection that the electrical ground connections of the power utility, telephone lines and internal metallic water pipe system, if present, are connected together. This precaution may be particularly important in rural areas.

Caution: Users should not attempt to make such connections themselves, but should contact the appropriate electric inspection authority, or electrician, as appropriate.

NOTICE: The Ringer Equivalence Number (REN) assigned to each terminal device provides an indication of the maximum number of terminals allowed to be connected to a telephone interface. The termination on an interface may consist of any combination of devices subject only to the requirement that the sum of the Ringer Equivalence Numbers of all the devices does not exceed 5. The Ringer Equivalence Number for this equipment is 0.3.

AVIS DE L'INDUSTRIE CANADA

AVIS: L'étiquette d'Industrie Canada identifie le matériel homologué.

Cette étiquette certifie que le matériel est conforme aux normes de protection, d'exploitation et de sécurité des réseaux de télécommunications, comme le prescrivent les documents concernant les exigences techniques relatives au matériel terminal. Le Ministère n'assure toutefois pas que le matériel fonctionnera à la satisfaction de l'utilisateur.

Avant d'installer ce matériel, l'utilisateur doit s'assurer qu'il est permis de le raccorder aux installations de l'entreprise locale de télécommunication. Le matériel doit également être installé en suivant une méthode acceptée de raccordement. L'abonné ne doit pas oublier qu'il est possible que la conformité aux conditions énoncées ci-dessus n'empêche pas la dégradation du service dans certaines situations.

Les réparations de matériel homologué doivent être coordonnées par un représentant désigné par le fournisseur. L'entreprise de télécommunications peut demander à l'utilisateur de débrancher un appareil à la suite de réparations ou de modifications effectuées par l'utilisateur ou à cause de mauvais fonctionnement.

Pour sa propre protection, l'utilisateur doit s'assurer que tous les fils de mise à la terre de la source d'énergie électrique, des lignes téléphoniques et des canalisations d'eau métalliques, s'il y en a, sont raccordés ensemble. Cette précaution est

particulièrement importante dans les régions rurales.

Avertissement: L'utilisateur ne doit pas tenter de faire ces raccordements lui-même; il doit avoir recours à un service d'inspection des installations électriques, ou à un électricien, selon le cas.

AVIS: L'indice d'équivalence de la sonnerie (IES) assigné à chaque dispositif terminal indique le nombre maximal de terminaux qui peuvent être raccordés à une interface.

La terminaison d'une interface téléphonique peut consister en une combination de quelques dispositifs, à la seule condition que la somme d'indices d'équivalence de la sonnerie de tous les dispositifs n'excède pas 5. L'indice d'équivalence de la sonnerie de ce matériel est de 0.3.

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SONY®

Welcome

Congratulations on your purchase of the Sony VAIO® notebook. Sony has combined leading-edge technology in audio, video, computing, and communications to provide you with state-of-the-art personal computing.

Features

For a complete description of the specifications of your VAIO® notebook, see page 80.

- **Exceptional performance:** Your notebook includes a fast Mobile AMD-K6®-2+ 550MHz processor and a V.90 compatible modem.*
- **Portability:** The rechargeable battery pack provides hours of use without AC power.
- **Sony audio and video quality:** High-quality MPEG1 and MPEG2 video, which supports full-screen display and enables you to take advantage of today's advanced multimedia applications, games, and entertainment software.
- **Multimedia features:** Enjoy the stereo speakers or use headphones (not supplied) to listen to audio and video CDs.

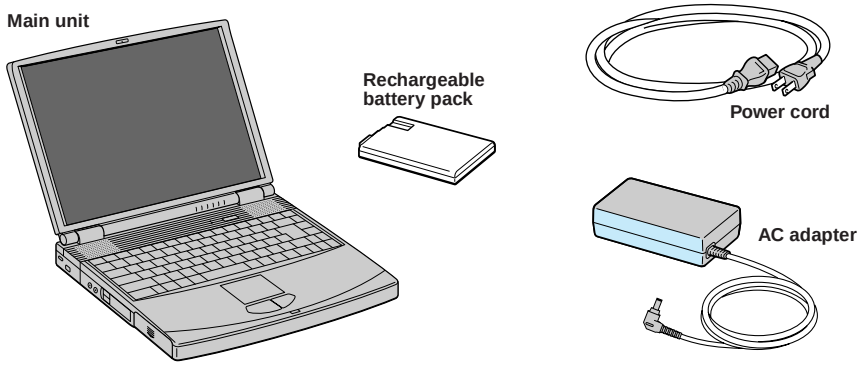
* Actual upload and download speeds may vary due to line conditions, ISP support, and government regulations.

- **Microsoft® Windows® operating system:** Your system comes with Microsoft® Windows® Millennium Edition.
- **Communications:** Access popular online services, send e-mail, browse the Internet, and use fax features.
- **CD-ROM(PCG-F610 only):** Your system comes equipped with a built-in 24X max. CD-ROM drive.*
- **DVD-ROM (PCG-F630 only)**: Your system comes equipped with a built-in 8X max. DVD-ROM drive.

* Data on a CD-ROM is read at a variable transfer rate, ranging from 10.3X at the innermost track to 24X at the outermost track (the data transfer standard 1X rate is 150 kbytes/s). The average data transfer rate is 17.2X or 2580 kbytes/s.

Unpacking Your Notebook

Remove the following hardware items from the box:



Manuals

- The *VAIO® Notebook User Guide* (this manual) contains information on how to get the most from your computer, find help, and solve common problems. It also includes product specifications.
- The Microsoft® Windows® Millennium Edition *Getting Started* manual explains how to use the basic features of the operating system.

Recovery CDs

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

Software CDs

- Microsoft® Word® 2000

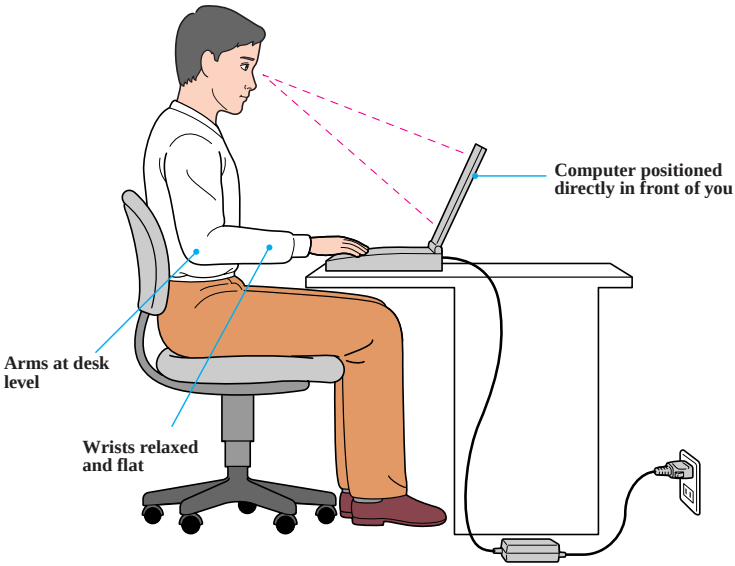
Other

- Packet containing special product offers

Ergonomic Considerations

You will be using your notebook computer as a portable device in a variety of environments. Whenever possible, you should attempt to apply the following ergonomic considerations to both stationary and portable environments.

Ergonomic Position



- **Position of your computer —** Place the computer directly in front of you as you work. Keep your forearms horizontal, with your wrists in a neutral, comfortable position while using the keyboard, touchpad, or external mouse. Let your upper arms hang naturally at your sides. Take breaks during sessions with your computer. Excessive use of the computer may strain muscles or tendons.
- **Furniture and posture —** Sit in a chair with good back support and armrests. Adjust the level of the chair so your feet are flat on the floor. A footrest may make you more comfortable. Sit in a relaxed, upright posture and avoid slouching forward or leaning far backward.
- **Viewing angle of the computer's display —** Use the display's tilting feature to find the best position. You can reduce eye strain and muscle

fatigue by adjusting the tilt of the display to the proper position. Adjust the brightness setting of the display also.

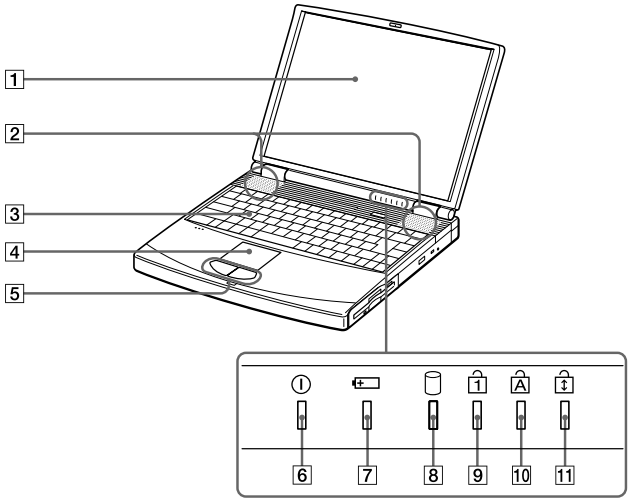
- **Lighting —** Choose a location where windows and lights do not create glare and reflection on the display. Use indirect lighting to avoid bright spots on the display. You can also purchase accessories for your display that help reduce glare. Proper lighting adds to your comfort and work effectiveness.
- **Placement of an external display —** When using an external display, set the display at a comfortable viewing distance. Make sure the display screen is at eye level or slightly lower when you are sitting in front of the monitor.

Using Your Notebook

This section describes how to start using your computer and how to use your computer's internal and external devices such as the touchpad, floppy disk drive, and DVD-ROM (PCG-F630) or CD-ROM (PCG-F610) drive.

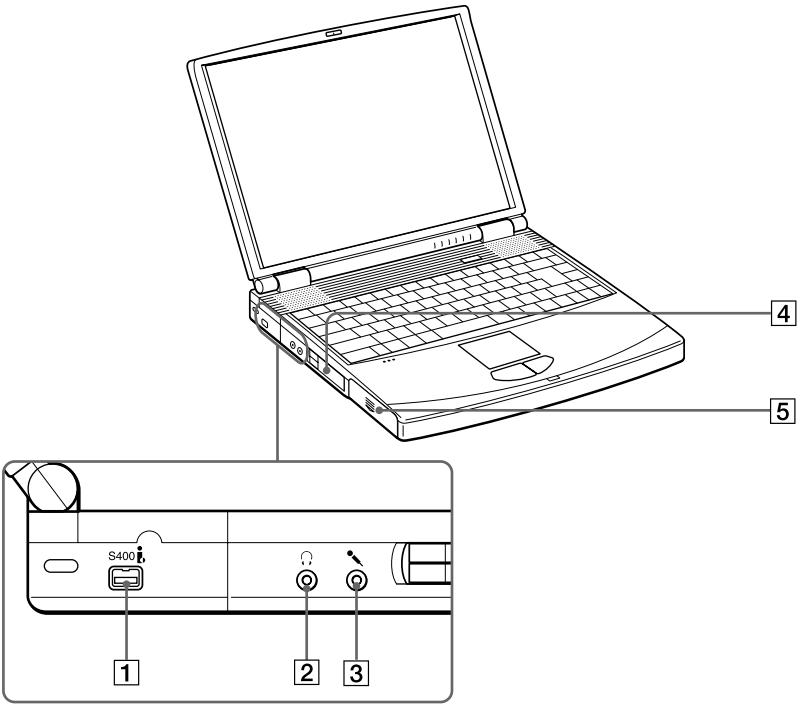
Locating Controls and Connectors

Front



1. LCD (Liquid Crystal Display) screen (page 23)
2. Speakers (pages 23, 45)
3. Keyboard (page 20)
4. Touchpad (page 24)
5. Left/right buttons (page 24)
6. Power indicator (page 10)
7. Battery indicator (pages 13, 22)
8. Hard disk drive indicator (page 22)
9. Num Lock indicator (page 22)
10. Caps Lock indicator (page 22)
11. Scroll Lock indicator (page 22)

Left



1 S400 i.LINK® connector (page 48)

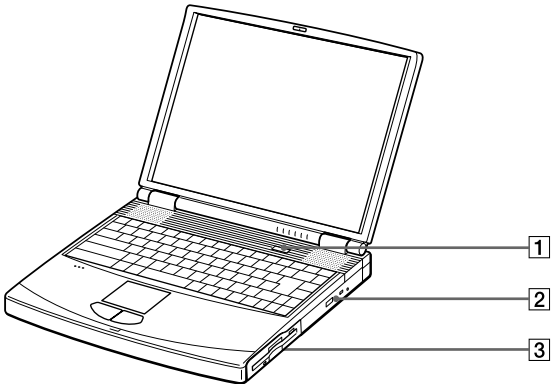
2 Headphone connector (pages 42, 45)

3 Microphone connector (pages 42, 46)

4 PC card slots (page 29)

5 Battery bay (page 12)

Right



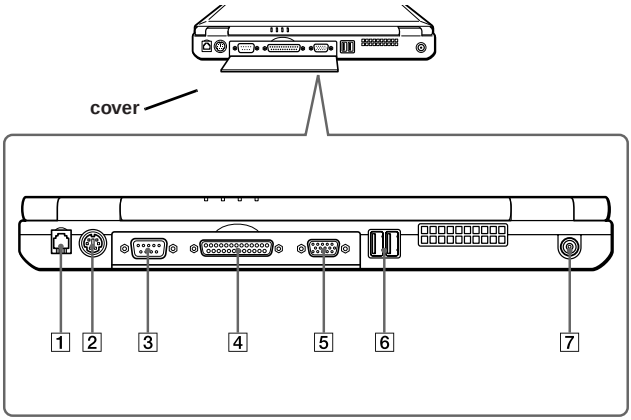
1 Power button (page 16)

2 CD-ROM drive (PCG-F610) or DVD-ROM drive (PCG-F630) (page 26)

3 Floppy disk drive (page 25)*

* Always leave the floppy disk drive in the drive bay. If debris or other foreign objects enter the drive bay, the unit may be damaged.

Back



1 Modem jack (page 35)

2 Mouse/Keyboard connector (page 44)

3 Serial connector

4 Printer connector (page 40)

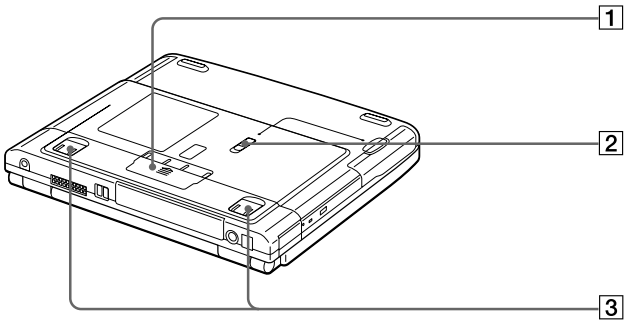
5 Monitor connector (page 41)

6 USB connectors (page 50)

7 DC In connector (page 11)

There is a ventilation slot located between the USB connector and the DC In connector. Do not cover the ventilation slot when your computer is on.

Bottom



1 Port replicator connector cover (pages 37, 39)

2 Floppy disk drive bay RELEASE lever*

3 Tilt stands

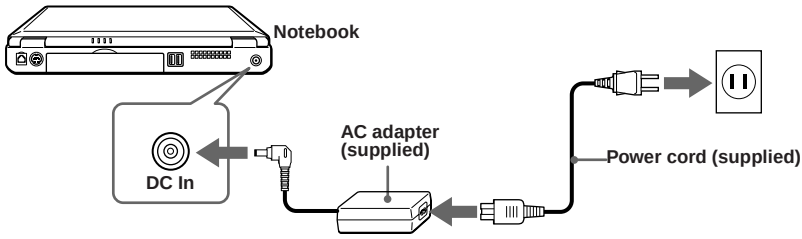
* Always leave the floppy disk drive in the drive bay. If debris or other foreign objects enter the drive bay, the unit may be damaged.

Connecting a Power Source

You can use either AC power or a rechargeable battery pack as a power source.

Using the AC Adapter

1. Plug the cable attached to the AC adapter into the DC In connector on the computer.
2. Plug one end of the power cord into the AC adapter.
3. Plug the other end of the power cord into an AC outlet.



Notes on the AC Adapter

- ❑ Your computer operates on 100V-240V AC 50/60 Hz.
- ❑ Do not share the AC outlet with other power-consuming equipment, such as a copy machine or shredder.
- ❑ You can purchase a power strip with a surge protector. This device prevents damage to your computer caused by sudden power surges such as those that may occur during an electrical storm.
- ❑ Do not place heavy objects on the power cord.
- ❑ To disconnect the cord, pull it out by the plug. Never pull the cord itself.
- ❑ Unplug your computer from the wall outlet if you will not be using the computer for a long time.
- ❑ When the AC adapter is not used, unplug it from the AC outlet.
- ❑ Use only the AC adapter supplied. Do not use any other AC adapter.

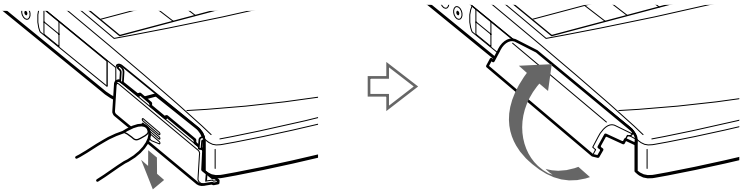
Using Battery Power

You can use a battery pack as a source of power.For more information on conserving battery life, see “Using Power Saving Modes” on page 32.

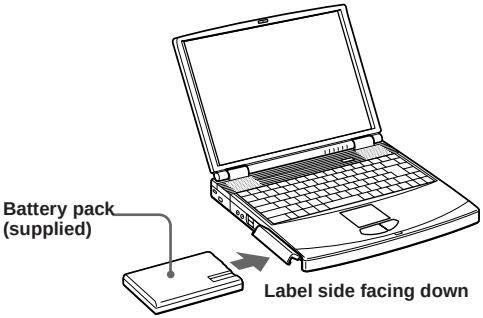
The battery pack that comes with your computer is not fully charged at the time of purchase. Follow the steps below to insert and charge the battery pack.

To insert the battery pack

1. Open the cover of the battery bay.



2. Insert the battery pack into the battery bay on the left side of the computer.



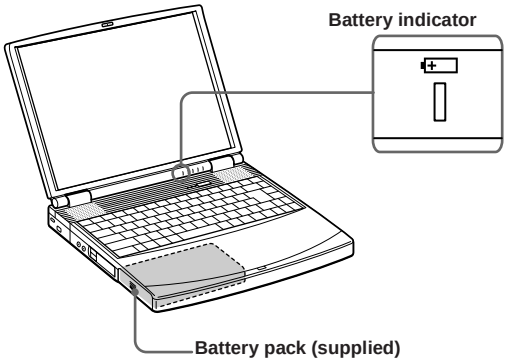
3. Close the cover of the battery bay until it clicks.

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

To charge the battery pack

1. Connect the AC adapter to the computer.
2. Insert the battery pack.

The computer automatically charges the battery (the battery indicator light flashes in a double-blink pattern as the battery charges). When the battery is 85 percent full, the battery indicator light turns off. This process takes approximately two hours. To charge the battery completely, continue charging for an additional hour



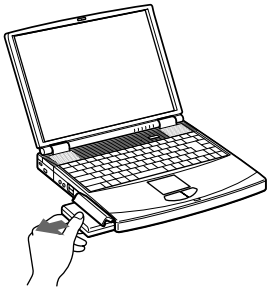
Battery Indicator	*Meaning*
1	Indicates the status of the battery pack in the battery bay on the left side of the computer.

Battery Indicator Light Status	*Meaning*
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.

If the battery level falls below 10% (both the battery indicator and power indicators will blink), you should either attach the AC adapter to recharge the battery or shut down your computer and insert a fully charged battery.
When the computer is directly connected to AC power and has a battery pack in the battery bay, it uses power from the AC outlet.
Keep the battery pack in the computer while it is directly connected to AC power. The battery pack continues to charge while you are using the computer.
The battery pack supplied with your computer is a lithium-ion battery and can be recharged at any time. Charging a partially discharged battery does not affect battery life.
The battery indicator light is on while you use the battery pack as a power source. When battery life is nearly depleted, the battery indicator starts flashing.
Your computer may not enter Hibernation mode when the battery life is low if certain software applications are active or if certain peripheral devices are attached. 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 Hibernation.

To remove the battery pack

1. Open the cover of the battery bay.
2. Pull out the battery pack.



3. Close the cover of the battery bay.

You may lose data if you remove the battery pack while the computer is on and not connected to the AC adapter or if you remove the battery while the computer is in Standby mode.

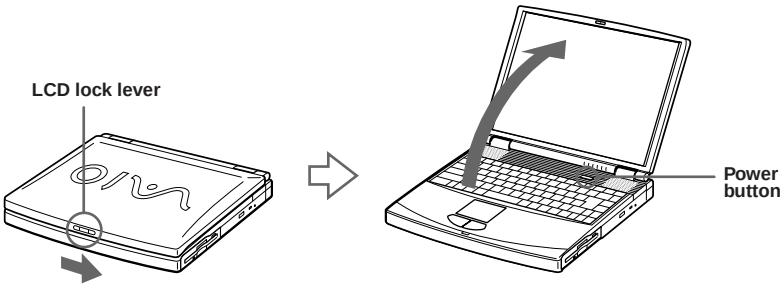
Notes on Batteries

- Never leave the battery pack in temperatures above 140° F (60° C), such as under direct sunlight or in a car parked in the sun.

- Battery life is shorter in a cold environment. This is due to decreased battery efficiency at low temperatures.
- Charge the batteries at temperatures between 50° F and 80° F (10° C to 30° C). Lower temperatures require a longer charging time.
- While the battery is in use or being discharged, the battery pack heats up. This is normal and is not cause for concern.
- Keep the battery pack away from all sources of heat.
- Keep the battery pack dry.
- Do not open or try to disassemble the battery pack.
- Do not expose the battery pack to any mechanical shock.
- If you are not using the computer for an extended period of time, remove the battery pack from the computer to prevent damage to the battery.
- If, after fully charging the battery pack, the battery power is still low, the battery pack may be reaching the end of its life and should be replaced.
- You do not need to discharge the battery before recharging.
- If you have not used the battery pack for a considerable amount of time, recharge the battery.

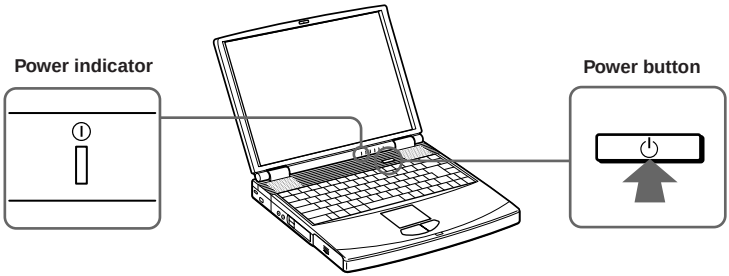
Starting Your Computer

1. Slide the LCD lock lever in the direction of the arrow, and lift the cover.



2. Press the power button on top of the computer until the green power indicator light turns on.

(Windows Me only) When starting your notebook for the first time, the VAIO InitManager dialog box will appear. Please select OK to begin initial setup. If you do not execute the initial setup, you cannot use part of VAIO original hardware functions such as scroll function of touchpad.



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

3. If necessary, adjust the brightness controls for the LCD display. To decrease the brightness press shift+Fn+F5. To increase brightness press Fn+F5.

Shutting Down Your Computer

To avoid potential loss of data, follow these steps to shut down your computer.

1. Click the Start button on the Windows® taskbar.
2. Click Shut Down at the bottom of the Start menu to display the Shut Down Windows dialog box.
3. Select Shut Down.
4. Click OK.

Respond to any prompts warning you to save documents.

5. Wait for your computer to turn off automatically. The power indicator (green) turns off.
6. Turn off any peripherals connected to your computer.

If you are unable to shut down your computer using the steps described above, press the Ctrl+Alt+Delete keys at the same time to restart the computer. If you are unable to restart the computer in this way, you can press the power button and hold it for four seconds. This operation may result in data loss.

Handling the LCD Screen

- Do not leave the LCD facing the sun as it can damage the LCD. Be careful when using the computer near a window.
- Do not scratch the LCD or exert pressure on it. This could cause malfunction.
- Using the computer in low temperature conditions may produce a residual image on the screen. This is not a malfunction. When the computer returns to normal temperature, the screen returns to normal.
- The screen becomes warm during operation. This is normal and does not indicate a malfunction.
- The LCD is manufactured using high-precision technology. You may, however, see tiny black points and/or bright points (red, blue, or green) that continuously appear on the LCD. This is a normal result of the manufacturing process and does not indicate a malfunction.

Registering Your Computer

You can take advantage of Sony's commitment to quality customer support and receive the following benefits by registering your computer with Sony.

- **Sony Customer Support –** Talk to a Support Representative to troubleshoot problems you may be having with your computer.
- **Express service –** Provides a fast and direct return of your VAIO notebook to Sony for service of your computer.

If you have not already registered, follow these steps to use your notebook's online registration service.

You must connect your phone line before using any online services, including the online registration service. See "Connecting a Phone Line" on page 35.

1. Click the Sony VAIO Registration icon on the VAIO desktop.
2. Enter the information requested on the first online registration form. Press the Tab key to move from box to box.
3. Click the Next button to advance to the next form.
4. Complete the remaining forms by clicking the Next button each time you complete a form.

The computer automatically transfers your registration information using your built-in modem and a toll-free telephone number.

Changing the Window Design of Sony Software

To change the window design of Sony software

1. Click the Start button, point to Settings, and then click Control Panel. (If you don't see the UI Design Selector, from the Control Panel, click "view all Control Panel options.")
2. Click UI Design Selector.
3. Click << or >> and select the desired design.
4. Click Apply.

The "UI Design Selector" window design changes. The window design for your Sony software will match the "UI Design Selector" window.

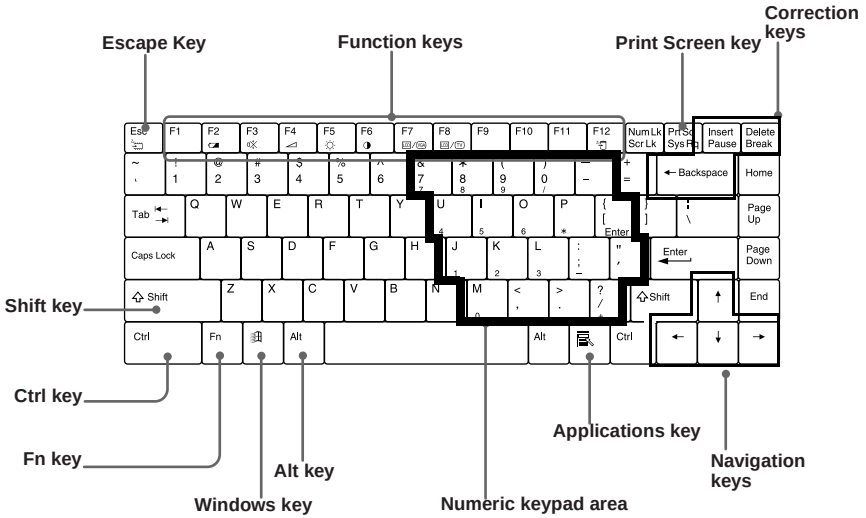
To try another selection, click << or >>. Then, click OK.

The UI Design Selector closes and the window design of your Sony software window design displays.

Note: You may use the feature with UI Design Selector-compatible software only.

Using the Keyboard

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



Key	*Description*
Numeric keypad area	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. Note that you must press the Num Lock key to activate the numeric keypad. (When you do so, the Num Lock light will be on.)
Navigation keys	Several keys are devoted to moving the cursor on the screen.
Correction keys	The Insert, Back Space, and Delete keys enable you to make corrections in your documents.
Function keys	The twelve 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 places it in the Windows Clipboard. You can then paste the screen shot into a document and print it.

Key	Description
Operator 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 $.
Windows key	The key with the Windows logo displays the Windows Start menu; it is the equivalent of clicking the Start button on the taskbar. See "Combinations and Functions with the Windows Key" on page 21.
Fn key	The Fn key is used in combination with other keys to issue commands. See "Combinations and Functions with the Fn Key" on page 23.
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 Windows Help.
+ Tab	Switches the selected button on the taskbar.
+ E	Displays Windows Explorer.
+ F	Displays the Windows Find: All Files window to find a file or folder. This is the equivalent of selecting Find and then Files or Folders from the Start menu.
+ Ctrl + F	Displays the Windows Find: This is the equivalent of selecting Find and then Computer from the Start menu.
+ M	Minimizes all displayed windows.
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 Properties window. This is the equivalent of double-clicking the System icon in the Control Panel.

Indicators

Indicator	Function
Power	Light is green when the power to the computer is turned on. Light flashes red in Standby mode. The light turns off when the computer is in Hibernation mode or powered off.
Battery	Indicates the status of the battery inserted in the battery bay on the left side of the computer.
Hard disk	Lights when data is being read from or written to the hard drive. Do not enter System Suspend mode or turn off the computer when this indicator light is on.

Light	On	Off
Num Lock	The number keys in the numeric keypad are active.	The alphanumeric character keys in the keypad area are active.
Caps Lock	The letters appear in uppercase as you type. The Shift key lowers the case of typed letters when Caps Lock is on.	Letters appear in lower case as you type (unless you hold down the Shift key).
Scroll Lock	The screen scrolls differently. (Exactly how it scrolls depends on the specific application. It has no effect in many applications.)	Information moves across the display normally.

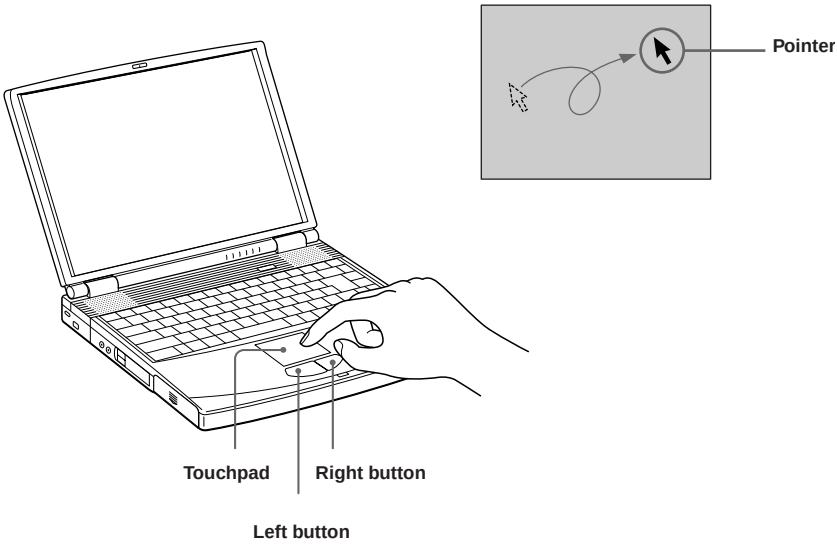
Combinations and Functions with the Fn Key

Combinations/ Feature	Function
Fn+ Esc or Fn+ F12	Hibernation mode: Provides for the lowest level of power consumption. When you execute 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 system to its original state, use the power button to turn on power.
Fn+ (F3) Mute On/Off	Toggles the built-in speaker off and on.
Fn+ LCD/ VGA (F7) Switch to the external monitor/LCD	Toggles through the LCD, external display (connected to the Monitor connector) and both LCD and external display. Only LCD → LCD and external display → Only external display → Only LCD
Fn+F5	increases brightness of LCD display
Fn+Shift+F5	Decreases brightness of LCD display
Fn+F4	Increases volume
Fn+Shift+F4	Decreases volume

Some functions are not available until Windows launches.

Using the Touchpad

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

See Mouse Help for information on touchpad features, such as clicking both buttons simultaneously, adjusting touchpad speed, and Easy Launcher functions. To access Mouse Help, click the Start button, select Settings and then Control Panel. Click the Mouse icon in the Control Panel and click the Help button.

Using the Floppy Disk Drive

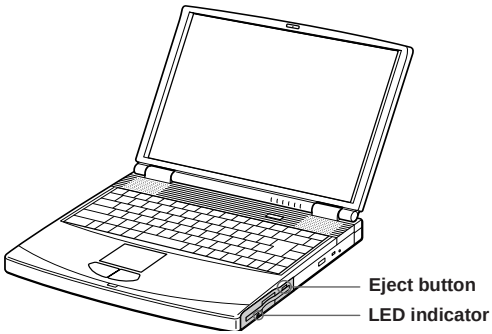
The computer comes with a floppy disk drive.*

To insert a diskette

1. Hold the diskette with the label side facing up.
2. Gently push the diskette into the drive until it clicks into place.

To remove a diskette

- When you finish using the diskette, wait until the LED indicator light turns off and then press the Eject button to remove the diskette.



Do not press the Eject button when the LED indicator is turned on. Otherwise, data may be lost. Do not remove floppy disk drive. Critical data loss may occur

* Sony recommends leaving the floppy disk drive in the drive bay at all times. If debris or other foreign objects enter the drive bay, the unit may be damaged.

Using the CD-ROM or DVD-ROM

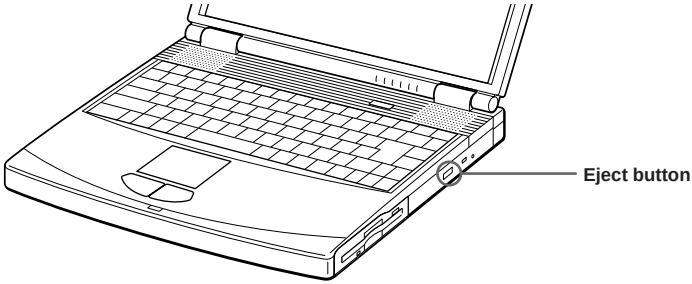
Your computer comes with a CD-ROM (PCG-F610) or DVD-ROM (PCG-F630).

To insert a disc

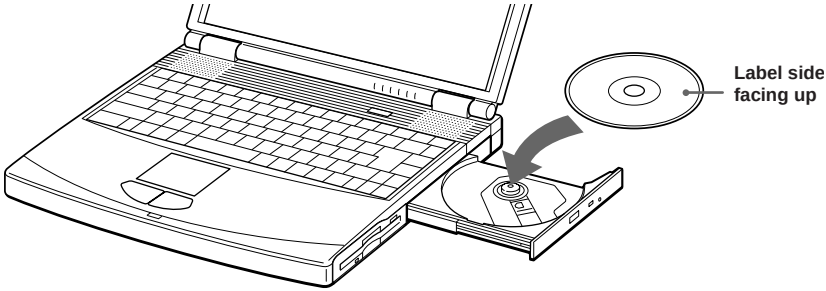
1. Turn on the computer.

When the computer is in Standby or Hibernation mode, you cannot insert a disc.

2. Press the Eject button to open the CD-ROM or DVD-ROM drive. The tray slides out.



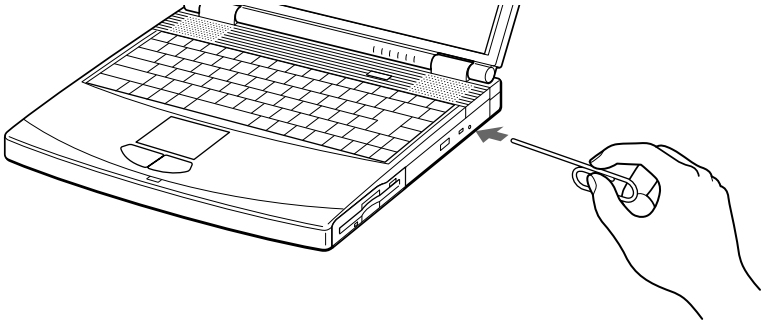
3. Place a CD-ROM or DVD-ROM in the tray with the label side facing up. Push the disc onto the hub until the disc clicks into place.*



* You can play both CDs and DVDs with your DVD-ROM drive (PCG-F630).

4. Close the tray by pushing it gently.

Be sure to seat the disc firmly over the hub fingers. If you do not seat the disc firmly, you could damage your CD-ROM or DVD-ROM drive and you may not be able to open the tray.
When you finish using a disc, wait until the LED indicator light turns off. Then, press the Eject button to remove the disc.
If the disc does not come out when you press the Eject button, turn off the computer and insert a thin, pointed object into the manual eject hole.



Playing a DVD

- ❑ You can play DVDs using a DVD-ROM drive and the Media Bar software. See the online manual that came with the Media Bar software for details.

On Handling CD and DVD media

- ❑ Do not touch the surface of the disc.
- ❑ Do not drop or bend the disc.

On Cleaning CD and DVD media

- ❑ Fingerprints and dust on the surface of a disc may cause read errors. Proper care of the disc is essential to maintain its reliability. Do not use solvents such as benzine, thinner, commercially available cleaners or anti-static spray, as they may cause damage to the disc.
- ❑ For normal cleaning, hold the disc by its edge 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.

Changing the Video Memory Size

The video memory for this notebook computer uses a part of the main memory. You can select the size, 2 MB/4 MB/8 MB, the default setting is 4 MB. Select 4 MB when using features such as dual display mode and 8 MB for higher resolution and better color, when playing 3D games.

If you set the video memory to 2 MB, more memory can be assigned to the main memory; however, this setting limits the resolution and the number of colors.

1. Click Start, point to Settings, then click Control Panel. The Control Panel appears.
2. Double-click the Display icon. The Display Properties window appears.
3. Click the Settings tab.
4. Click the Advanced button. The Trident CyberBlade i7 AGP Properties window appears.
5. Click the Memory tab.
6. Select the video memory size that you want to set. Click OK.
7. When the Warning Message appears, Click OK to restart the computer.

Using PC Cards

Your computer includes two PC card slots. PC cards allow you to connect portable external devices such as another hard disk drive, or to connect to a network.

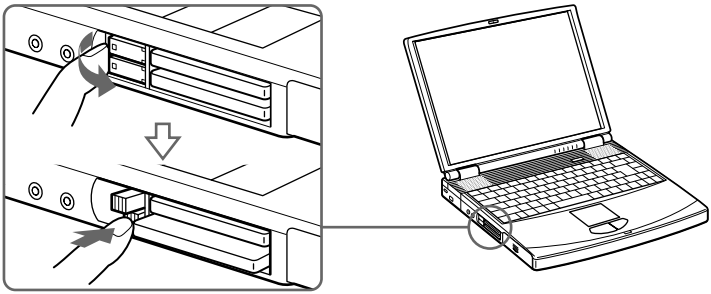
Warning: When using a PC card with a head that sticks out of the slot (Wireless LAN cards, etc.), do not move your computer with the PC card inserted. Once a PC card is inserted, do not add any force to the PC card, such as touching the head of a PC card when you lift up your computer. It may damage your computer.

To insert a PC card

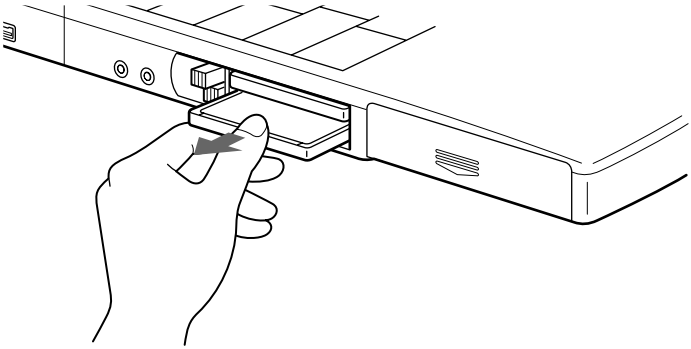
Use the lower slot for Type III PC cards.

You do not need to shut down the computer before inserting or removing a PC card.

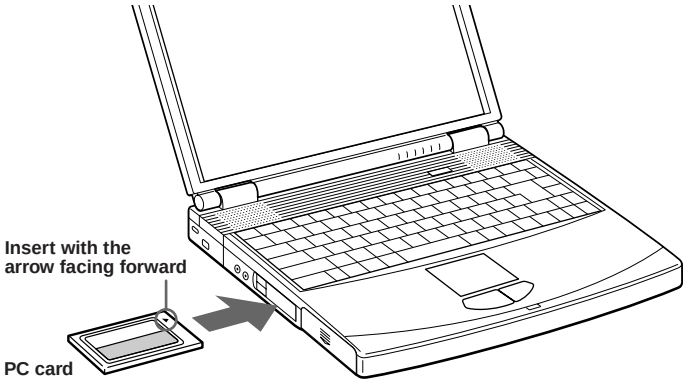
1. Pull the PC card release button out from the computer and push it in toward the computer.



2. Remove the PC card slot protector.
   When you use a Type III PC card, you need to remove both the top and bottom PC card slot protectors.



3. Insert the PC card into the PC card slot, front label facing up. Gently push the card into the slot until the card is fixed into the connector. The release button comes out.



Do not force a card into the slot as this may damage the connector pins. If you have difficulty inserting a card, check that you are inserting the card with the correct orientation. See the manual that came with your PC card for more information on use. For some PC cards, if you alternate between normal power operation and Hibernation mode while the card is inserted, you may find that a device connected to your system is not recognized. Reboot your system to correct the problem.

To remove the PC card

1. Double-click in the system task tray.
2. The "Unplug or Eject hardware" dialog box appears.

3. In the Unplug or Eject Hardware dialog box, select the appropriate option, and then click Stop.
4. Confirm the device and click OK.
5. A message appears informing you that the device can now be safely removed from the system.
6. Press the PC card RELEASE button to remove the PC card.

Notes on using PC cards

- For some PC cards, if you alternate between normal power operation and the Standby or Hibernation power-management modes while the card is inserted, you may find that a device connected to your system is not recognized. Reboot your system to correct the problem.
- Some PC cards may require that you disable idle devices when using the PC card.
- Be sure to use the most recent software driver provided by the PC card manufacturer.
- If an "!" mark appears on the Device Manager tab in the System Properties dialog box, remove the software driver and then reinstall it.
- You may not be able to use some PC cards or some functions of the PC card with this computer.
- If you have difficulty inserting a card, check that you are inserting the card with the correct orientation. See the manual that came with your PC card for more information on use.

Using Power Saving Modes

When you use a battery as the source of power for your computer, you can take advantage of power management settings to conserve battery life. 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 Hibernation. When using battery power, you should be aware that the computer automatically enters Hibernation mode when the remaining battery charge drops below 5 percent. You can change the settings of power saving modes in the Power control of Control Panel.

Change the Power Saving Mode settings from Power Options in the Control Panel.

If the battery level falls below 10 percent, you should either attach the AC adapter to recharge the battery or shut down your computer and insert a fully charged battery.

Normal Mode

This is the normal state of your computer when it is in use. The green power indicator light is on in this mode. To save power, you can turn off a specific device such as the LCD or the hard disk.

Standby Mode

The computer saves the current state of the system in RAM and switches off power to the CPU. The umber power indicator light flashes in this mode.

To activate Standby mode

Press the power button and release it immediately.

To return to normal mode

Press the power button and immediately release or press any key.

Hibernation Mode

The state of the system is saved on the hard drive and power is turned off. The power indicator light is off in this mode.

To activate Hibernation mode

Press Fn+Esc or Fn+F12. The screen turns off, and then the computer enters Hibernation mode.

Do not move the computer until the power indicator turns off.

To return to normal mode

Turn on the computer by pressing the power button. The computer returns to its previous state.

When returning from Hibernation mode, the system status stored on the hard disk is erased and the computer starts normally if you press the power button and hold for more than four seconds.

- Time to return to Normal mode
  Standby requires less time to return to normal mode than Hibernation.
- Power consumption
  Standby uses more power than Hibernation.

Connecting Peripheral Devices

You can add functionality to your computer by connecting any of these peripherals:

- ❑ Phone line (page 35)
- ❑ Port replicator (page 36)
- ❑ Printer (page 40)
- ❑ External display (page 41)
- ❑ External mouse or keyboard (page 44)
- ❑ External speakers (page 45)
- ❑ External microphone (page 46)
- ❑ Digital video camera recorder (page 48)
- ❑ Universal Serial Bus (USB) device (page 50)

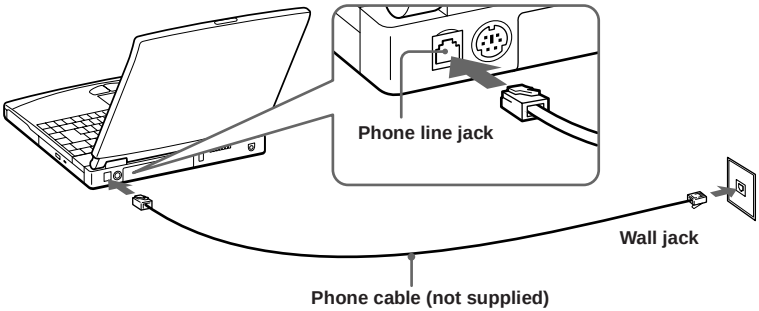
Before you connect peripherals, turn off the computer and all peripherals.
You do not need to turn off your computer to connect USB devices.
Connect the power cord only after connecting all cables.
Turn on the computer only after turning on all peripherals.

Connecting a Phone Line

You need to connect a phone line to take advantage of online services and the Internet.

In order to register your Sony VAIO notebook, register your software online, and use Sony Customer Support, you must connect to a phone line.

1. Plug one end of the phone cable into the phone line jack on the computer.



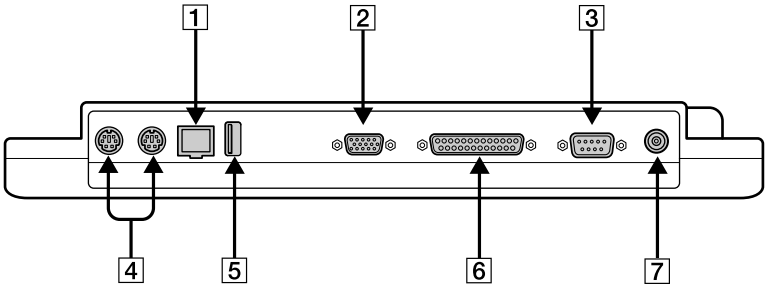
2. Plug the other end into the wall jack.

If the port replicator is attached, ensure that the phone cable is connected to the phone line jack and not the network (Ethernet) jack.

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.

Connecting the Port Replicator

Your notebook supports the use of an optional port replicator (PCGA-PRF1A). Attaching a port replicator enables you to connect additional peripherals to your computer.



1 Network (Ethernet)
2 Monitor (page 41)
3 Serial
4 Mouse/Keyboard (page 44)
5 USB (page 50)
6 Printer (page 40)
7 DC In (page 11)

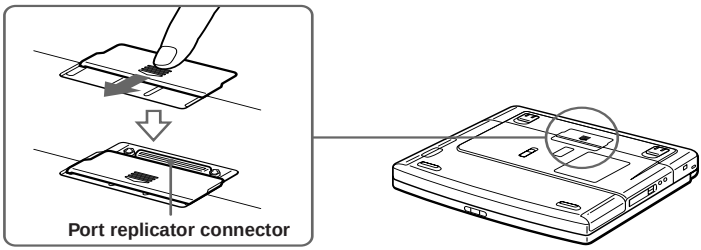
The port replicator can be powered only with an AC power adapter. Do not remove the AC adapter from the port replicator or the AC outlet while using the port replicator; this may cause data damage or hardware malfunctions.
When you attach your computer to the port replicator for the first time, the installation of the network driver starts automatically.

To attach your computer to the port replicator

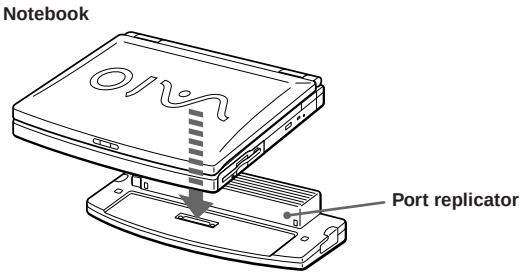
To supply power to your computer while it is connected to the port replicator, you can connect the AC adapter directly to the port replicator.

When attaching your computer to the port replicator, do not attempt to insert or remove the battery pack. Lifting and turning the computer with an attached port replicator could cause a temporary loss of power.

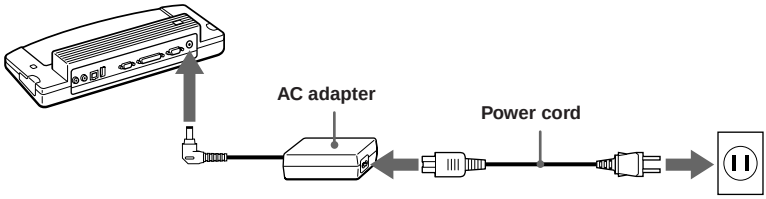
1. Turn off your computer and disconnect all peripherals.
2. On the bottom of the computer, slide the port replicator connector cover open.



3. Attach the bottom of the computer to the port replicator connector until it clicks.

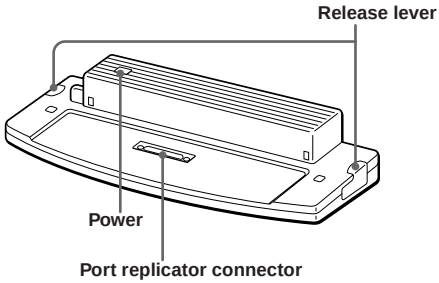


4. Plug the cable attached to the AC adapter into the **DC IN** connector on the port replicator. Plug the power cord into the AC adapter and an AC outlet.



Use the AC adapter that comes with your computer.

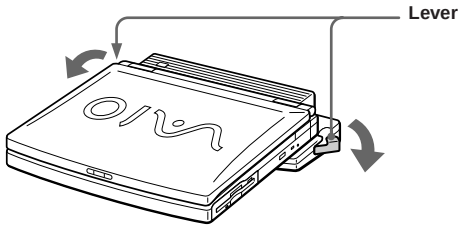
The power indicator light turns green.



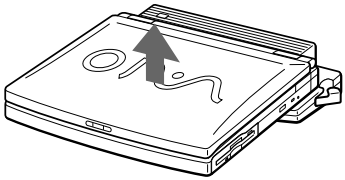
5. Turn on the computer.

To remove your computer from the port replicator when the power is off

1. Turn off your computer and the connected peripherals.
2. Pull the levers on each side of the port replicator to disengage the computer from the port replicator.



3. Lift the computer away from the port replicator.



4. Close the port replicator connector cover on the bottom of your computer.

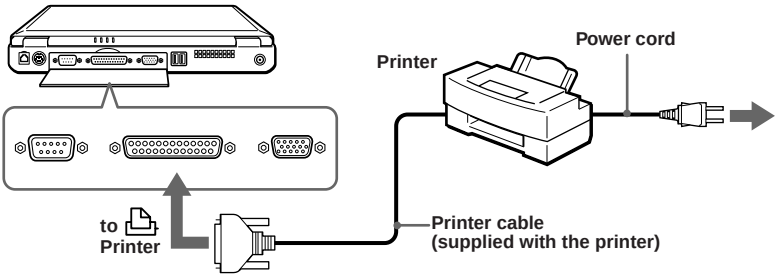
It is extremely important to close the port replicator connector cover after removing your computer from the port replicator. If the cover is left open, dirt may get inside and damage the computer.

Connecting a Printer

You can connect your computer to a printer that is compatible with Windows® Millennium Edition.

To connect a printer

❑ Use the symbol to locate the Printer connector. Plug the printer cable (supplied with the printer) into this port on the computer.



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

If your printer stops functioning after resuming from a power-saving mode, see "I cannot print" on page 66.

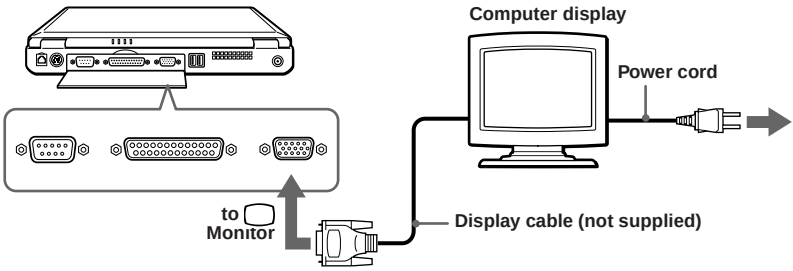
Connecting an External Display

You can connect an external display to your notebook. For example, you can use the computer with any of the following:

- Computer display (monitor) (page 41)
- Multimedia computer display (page 42)
- Projector (page 42)

To connect a computer display

- Use the ⬭ symbol on the back of the computer to locate the Monitor connector. Plug the display cable (not supplied) into this connector on the back of the computer.
- If necessary, plug one end of the display power cord into the display, and the other end into an AC outlet.



See the manual that came with your computer display for more information on installation and use.

When you connect an external display, you can toggle the display mode between the LCD on your computer and external displays.

To setup the external display

1. Click the Start button on the Windows® taskbar.
2. Point to Settings and click Control Panel.
3. Double-click Display.
4. Click the Settings tab, then click the Advanced button.
5. Select the Display Device tab.

6. Select the type of display:

LCD	Activates your computer's LCD.
LCD/CRT	Activates your computer's LCD and an external display that is connected to the Monitor connector on your computer.
CRT	Activates an external computer display that is connected to the Monitor connector on your computer.

7. Click OK.
8. A Warning Message appears. Click OK if the display devices are connected.
9. Another Warning Message dialogue box will appear. Click OK to confirm the changes.
10. Click OK to close the Display Properties screen.

Depending on the types of computer displays you are using, you may not be able to display the computer's LCD and external display simultaneously.

To connect a multimedia computer display

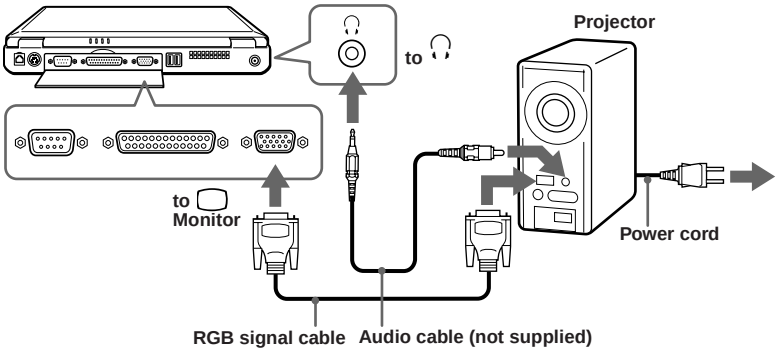
You can connect the notebook to a multimedia computer display that includes built-in speakers and a microphone.

1. Use the ▭ symbol to locate the Monitor connector. Plug the display cable into this connector.
2. Use the 🎧 symbol to locate the Headphone connector. Plug the speaker cable into this connector.
3. Use the symbol to locate the Microphone connector. Plug the microphone cable into this connector.

See the manual that came with your multimedia computer display for more information on installation and use.

To connect a projector

You can use a projector, such as the Sony LCD Projector, as an external display.

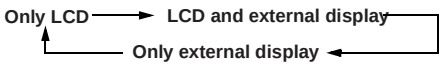


See the manual that came with your projector for more information on installation and use.

To select a display

When you connect an external display to the monitor connector, you can toggle the output between the Liquid Crystal Display (LCD), the external monitor, or both devices. Use the Fn+F7 keys to select display.

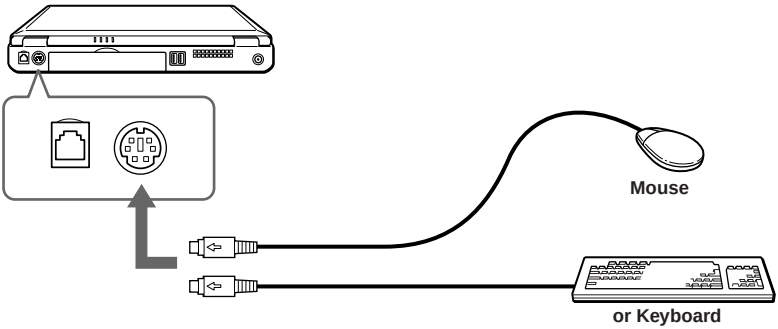
To	*Press*	*Result*
Switch to an external display	Fn+F7	Toggles between the LCD, the external display connected to the Monitor connector, or both the LCD and external display.



Connecting an External Mouse or Keyboard

You can connect a PS/2® style mouse or keyboard.

Plug the keyboard cable or mouse cable into this connector with the mark facing up.



To connect both a mouse and keyboard at the same time, use the optional PS/2 division connector.

See "Using the Keyboard" on page 20 for more information on using the keyboard.
See the manual that came with your mouse or keyboard for more information on installation and use.
Before you connect or disconnect the mouse or keyboard, turn off the computer.
Do not connect or disconnect the PS/2 device (keyboard or mouse) when the computer is on. It may cause malfunction.
The Sony USB mouse PCGA-UMS1 series (not supplied) is a USB device. So you must connect it to the USB connector.

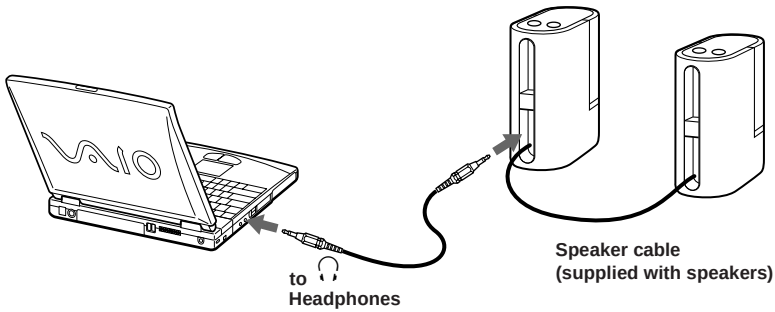
Connecting External Speakers

You can enhance the sound quality of your computer by connecting external speakers.

Make sure your speakers are designed for computer use.
Turn down the volume of the speakers before you turn them on.
Do not place diskettes on the speakers; the speakers' magnetic field may damage the data on the diskettes.

To connect external speakers

- Use the ∩ symbol to locate the Headphone connector. Plug the speaker cable into this connector.



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

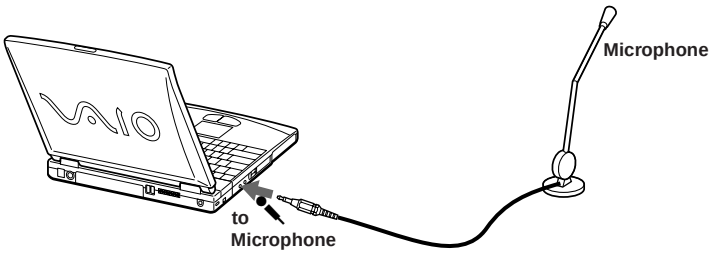
Connecting an External Microphone

You can enhance the quality of sound input by using an external microphone.

Make sure your microphone is designed for computer use. The microphone should be compliant with the plug-in power microphone.

To connect an external microphone

❑ Use the to locate the Microphone connector. Plug the microphone cable into this connector.



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

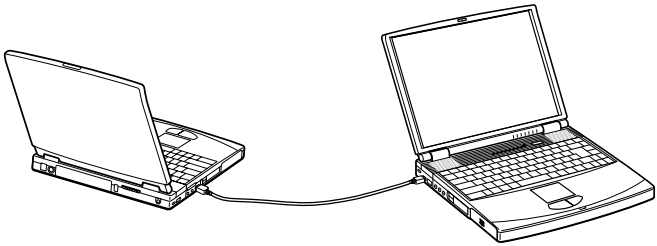
Using Smart Connect

Windows Me™

You can connect your VAIO® notebook to another VAIO computer that has the preinstalled Windows Me operating system or the Sony Smart Connect 3.0 software preinstalled. You may use an i.LINK® cable (optional) to connect the two systems and then use one computer to edit, copy, or delete files on the other

computer. You can also print from a printer that is attached to either computer. Select the STD mode in Smart Connect 3.0 software to connect with another computer that has Windows Me preinstalled.

Connecting with an i.Link cable



When you connect two VAIO computers, you must assign each computer a unique name. The computers can be identified by this unique name when the two computers are networked together.

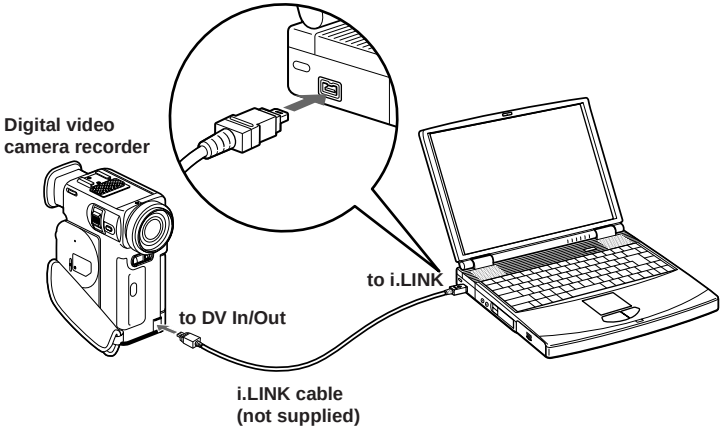
If you have previously purchased a VAIO computer or notebook that does not have the Windows Me operating system or Smart Connect 3.0 software preinstalled, consult the Sony website for support options (http://www.sony.com/pcsupport).

Connecting a Digital Video Camera Recorder

You can connect an i.LINK*-enabled digital video camera recorder to the i.LINK (IEEE1394) connector.

To connect a digital video camera recorder

- Plug one end of the i.LINK cable (not supplied) into the i.LINK connector on the left side of the computer and the other end into the DV In/Out connector on the digital video camera recorder.



The Sony digital video camera recorder is pictured; you may need to connect your camera differently.
On Sony digital video cameras, connectors labeled "DV In/Out" or "i.LINK" are i.LINK-compatible.
See the manual that came with your digital video camera recorder for more information on installation and use.
Do not connect more than one digital video camera at a time. The software supplied with your computer will not recognize multiple cameras.
The i.LINK connector on the computer does not supply power to external devices. If the external device requires power from the i.LINK connector, you cannot use the device with the computer.
The computer supports transfer rates up to 400 Mbps; however, the actual transfer rate is the lowest transfer rate of the slowest external device connected to your computer.
The i.LINK features available may vary depending on the software applications you use. See the documentation that came with your software for more information.

* i.LINK is a trademark of Sony used only to designate that a product contains an IEEE1394 connector. All products with an i.LINK connector may not communicate with each other.

i.LINK cables

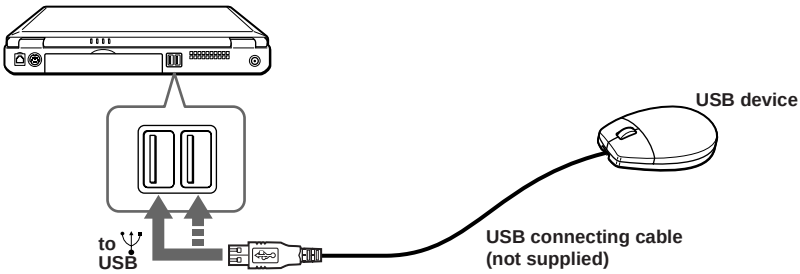
- i.LINK cables compatible with your VAIO notebook include cables with the following part numbers: VMC-IL4415 (a 1.5 meter cable with a 4-pin connector at each end), VMC-IL4615 (a 1.5 meter cable with a 4-pin connector at one end and a 6-pin connector at the other end), VMC-IL4408A (a 0.8 meter cable with a 4-pin connector at each end).
- You can purchase these cables from your local retailer, through the Sony VAIO® Direct website (http://vaio.sonystyle.com), or by calling 1-888-315-7669 (toll free).

Connecting a Universal Serial Bus (USB) Device

You can connect a USB device to your computer.

To connect a USB device

❑ Use the ψ symbol to locate the USB connector. Plug one end of the USB cable into this port and the other end into the USB device.



You can use the optional Sony USB mouse PCGA-UMS1 series with this computer. The USB mouse software driver is preinstalled in the computer. Plug the USB mouse into the USB connector, and restart the computer. All necessary drivers will be loaded.

See the manual that came with your USB device for more information on installation and use.

About the Software on Your Notebook

Your VAIO notebook is ready to help you work, play, learn, and communicate as soon as you turn it on. This section gives you an overview of the activities you can perform with your software titles. For support information, see “For Answers to Your Software Questions” .

Adobe Acrobat® Reader

Adobe Systems Incorporated

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

Adobe PhotoDeluxe® Home Edition

Adobe Systems Incorporated

Create amazing photo effects with Adobe PhotoDeluxe. Without learning complex software, you can enhance, restore, and be creative with your photos. Includes built-in guided activities, stock photos, clip art and templates to assist you.

America Online®

America Online

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.

CompuServe® 2000

CompuServe, Inc.

CompuServe is the most comprehensive source of organized business and educational information online today. CompuServe allows you to access the vastness of the Internet, without wasting time wading through it. Maximize your time online with CompuServe.

DVgate™

Sony Electronics

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

EarthLink Network TotalAccess®

EarthLink Network, 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, a free 6 MB web site, a member newsletter, and 24-hour technical support.

McAfee® VirusScan®

Network Associates, Inc.

Protect your computer from viruses. VirusScan can detect viruses from floppy disks, Internet downloads, e-mail attachments, intranets, shared files, CD-ROMs, and online services.

Media Bar™

Sony Electronics

Media Bar software is your all-in-one solution for audio/video playback. Media Bar software handles all common computer multimedia formats and controls selected Sony devices. In addition to audio/video library cataloging and playlist management, Media Bar software includes digital video quality control and effects features. Media Bar software seamlessly integrates a variety of new media formats with an easy-to-use software interface.

Microsoft® Internet Explorer

Microsoft Corporation

Internet Explorer delivers the web the way you want it. It is safe, easy to use, and you can personalize how you access the web. Outlook Express and other tools in Internet Explorer also help you have a great experience when you are on the web.

Microsoft® Word 2000

Microsoft Corporation

Microsoft Word 2000 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 2000 also extends that ease of use to international users, making it easy to create multilingual documents.

MovieShaker™ (PCG-F630 only)
Sony Electronics
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.

Netscape Communicator®
Netscape Communications
Netscape Communicator is an all-in-one Internet tool that makes it easy to browse the web, send Internet e-mail, chat, read newsgroups, and compose great web documents.

PhotoPrinter™ 2000 Pro
ArcSoft
PhotoPrinter Pro is an easy-to-use, advanced printing program that lets users quickly layout multiple images in multiple sizes on a single sheet of paper. PhotoPrinter Pro offers a wide selection of templates including landscape, portrait, free-style, mixed sizes, custom templates and more. The application includes enhancement tools and special effects for improving photos while giving users the ability to add text to any image.

PictureGear™
Sony Electronics
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.

Prodigy Internet®
Prodigy Communications Corporation
An online service that helps you find what you need online faster and smarter. Prodigy delivers powerful online content such as sports scores, stock quotes, news, and easy access to Excite, plus quality customer service, all at a competitive price.

Quicken® 2000

Intuit, Inc.

Quicken is a fast, easy way to organize your finances. Quicken works just like your checkbook, so it is easy to learn and use. Quicken manages all your finances, bank accounts, credit cards, investments, and loans. You can even pay your bills online.

Smart Capture

Sony Electronics

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

About Your Recovery CDs

Application Recovery CD(s)

Sony Electronics

This program allows you to reinstall individual applications and device drivers. Use it to restore corrupted or accidentally erased files.

System Recovery CD(s)

Sony Electronics

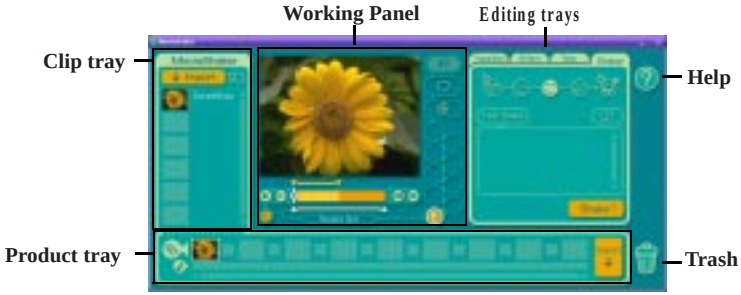
This program allows you to restore the software titles that shipped with your computer if they become corrupted or are erased accidentally. It can be used only to restore the hard disk of this Sony computer.

Software Instructions

Movie Shaker (PCG-F630 only)

This application can be used to create fun and innovative movies without any knowledge of film editing. In a few simple steps, motion pictures can be combined with special effects, still images (pictures), and music files and then saved in a format most computers can play.

Main Window



Importing Images and Sound Clips

1. Click Import.
2. Find the file you want to add.
3. Select the file.
4. Click Open. The file is added to the Clip tray.

Create a Movie using Shaker

After adding clip(s) to the Clip tray, you can create a short movie using the Shaker feature. Shaker randomly select clips from the Clip tray to create a 30-second scene.

1. Click the Shake tab.
2. Select a mood by clicking a face in the Shaker tray.

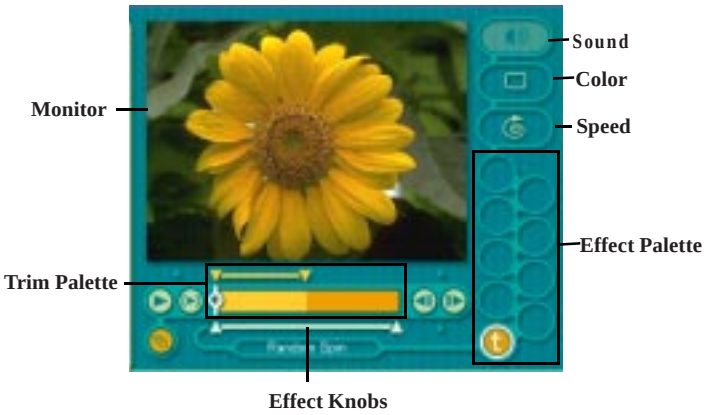
3. Click Shake !. A thirty second scene is automatically generated and saved to the Product tray.
4. To preview, switch the Work Panel to Product tray mode and press play.

- Scenes created with Shaker begin with black frame and after processing are placed in the first available slot on the Product tray.

Editing Clips and Scenes

You can edit your movie by adding effects and text, adjusting the color and contrast, and modifying the length of clips.

Working Panel



Adding effects to a scene or a clip

1 Double-click the clip or scene to move it to the Working Panel.

2 Select the Effects tab from the Editing tray.

3 Drag and drop the Effect you want to add from the Effects tray to the Effects palette on the Working Panel.

- To preview an Effect, click on the clip in the Working panel monitor. Your clip displays with the new effect on the Effect tray monitor.

4 See help for instructions on adjusting effect duration and replaying clips/ scenes.

Saving a Movie

1. Verify that the clip(s) you want to save is on the Product tray. See Help for more details on saving movies.
2. Click Export.
3. Select the format in which you want the document to be saved.
4. Click Next.
5. Locate the folder to which you want the file saved.
6. Name the file.
7. Click Save.

⚠ Exporting movies may take a long time to complete—Save movie as DV (Digital Video) takes the longest and Quick-Save is the fastest.

✍ For DV playback and smooth video playback, we recommend the following resolution/refresh rates: 1024×768/75Hz or lower.

For Answers to Your Software Questions

Acrobat® Reader, Adobe PhotoDeluxe® Home Edition, Adobe Premiere® LE (Adobe Systems Incorporated)

Web site	http://www.adobe.com/
phone	206-628-2746 (fee-based support)
fax	206-628-5737
e-mail	techdocs@adobe.com
hours	M-F, 6 AM-5 PM PT

America Online® (America Online)

Web site	http://www.aol.com/
phone	800-827-3338
hours	7 days a week, 24 hours a day

AT&T WorldNet® Service (AT&T)

Web site	http://www.att.net
phone	800-400-1447
e-mail	worldnet@attmail.com
hours	7 days a week, 24 hours a day

CompuServe® 2000 (CompuServe, Inc.)

Web site	http://www.compuserve.com/
phone	800-848-8990
hours	M-F, 8 AM - 1 AM ET, S-S 10 AM - 10 PM ET

EarthLink Network® (EarthLink Network, Inc.)

Web site	http://help.earthlink.net/techsupport/
phone	800-395-8410
e-mail	support@earthlink.net
hours	7 days a week, 24 hours a day

McAfee® VirusScan® (Network Associates, Inc.)

Web site	http://support.mcafee.com
phone	408-988-3832
e-mail	cybr@nai.com

hours	M-F 9AM-5PM Central Time

Netscape Communicator® (Netscape Communications Corporation)

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

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

Prodigy Internet® (Prodigy Communications Corporation)

Web site	http://www.prodigy.com/
phone	800-213-0992
hours	7 AM - 3 AM ET

Quicken® 2000 (Intuit Inc.)

Web site	http://www.intuit.com/support/
phone	900-555-4688
hours	7 days a week, 24 hours a day

Windows Me Operating System, Word, Internet Explorer (Microsoft Corporation)

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

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

Sony Service Center

For the Sony Service Center nearest you, call 1-888-4SONYPC (1-888-476-6972).

Troubleshooting

This section describes how to solve common problems you may encounter when using your computer and answer the most fequently asked questions. Many problems have simple solutions, so try these suggestions before you contact Sony Customer Support (http://www.sony.com/pcsupport).

When you reconnect devices be sure to turn off the computer as described in "Shutting Down Your Computer" on page 17. Turning off the computer using other methods may result in data loss.

Common Problems

My computer does not start

- Check that the computer is plugged into a power source and that it is turned on. Check that the power indicator on the front panel of the computer indicates that the power is on.
- Check that the battery pack is inserted properly and that it is charged.
- Make sure there is no diskette in the floppy disk drive.
- Confirm that the power cord and all cables are connected firmly, as described in "Connecting Peripheral Devices" on page 34.
- If you plugged the computer into a power strip or UPS, make sure the power strip or UPS is turned on and working.
- If you are using an external display, check that it is plugged into a power source and turned on. Check that the brightness and contrast controls are adjusted correctly. See the manual that came with your display for details.
- Moisture condensation may have occurred. Do not use the computer for at least one hour and then turn on the computer.
- When the internal backup battery is low on power, it may not be able to start your system properly. The message "Press <F1> to resume, <F2> to

setup" would appear at the bottom of the display. Should this happen, you need to initialize the BIOS. Follow steps 3 to 8 below.

When I turn on my computer, the message "Operating system not found" appears and Windows does not start

- Check the floppy disk drive to see if a non-bootable diskette is in the drive.
- If a non-bootable diskette is in the drive, turn off the computer, remove the diskette, and then turn on the computer again. Confirm that Windows starts properly. If Windows still does not start, follow the procedure below to initialize the BIOS.
- If the floppy disk drive is empty, follow the steps below to initialize the BIOS:

  1. Remove any peripheral devices connected to the computer.
  2. Turn the computer off and then turn it on again.
  3. Turn on the computer and press the F2 key when the Sony logo appears. The BIOS setup menu screen appears.
  4. Press the arrow keys to select the Exit menu.
  5. Press the arrow keys to select Get Default Values and then press the Enter key. The message "Load default configuration now?" appears.
  6. Check that Yes is selected, then press the Enter key.
  7. Press the arrow keys to select Exit (Save Changes) and then press the Enter key. The message "Save configuration changes and exit now?" appears.
  8. Check that Yes is selected, then press the Enter key. The computer restarts.

If your computer still displays the message "Operating system not found" and Windows does not start, contact Sony Customer Support.

My LCD does not display anything

- Check that the computer is plugged into a power source and that it is turned on. Check that the power indicator on the front panel of the computer is on.
- Check that the battery pack is inserted properly and that it is charged.
- The computer may be in LCD (Video) Standby mode. Press any key to activate the display.

The window I just closed continues to appear on my LCD

- Press the Windows key and D key twice to refresh the screen.

The screen image on my external display is not centered or sized properly

Use the controls on your external display to adjust the image. See the manual supplied with your display for more information.

My computer "locks up"

- Try restarting the computer. On the Windows taskbar, click the Start button, click Shut Down, and then click Restart the computer.
- If you cannot restart as described in the preceding step, you can restart the computer by pressing Ctrl+Alt+Delete.
- If the previous step does not work, press the power button and hold it for at least four seconds. This turns off the power.
- If your computer locks up while playing a CD-ROM or DVD-ROM, stop the CD-ROM or DVD-ROM, and restart the computer by pressing Ctrl+Alt+Delete.

Pressing Ctrl+Alt+Delete may result in data loss in files that are currently open.

My software program "locks up" or crashes

Contact the software publisher or designated provider for technical support.

My CD-ROM or DVD-ROM drive tray does not open

- Make sure the computer is turned on.
- Press the Eject button on the CD-ROM or DVD-ROM drive.
- If the Eject button does not work, you can open the tray by inserting a pointed object into the hole to the right of the Eject button.

I cannot play a CD-ROM or DVD-ROM

- Make sure the label of the CD-ROM or DVD-ROM is facing up.
- If the CD-ROM or DVD-ROM requires software, make sure the software is installed according to the program's instructions.
- Moisture condensation may have occurred. Leave the computer for at least 1 hour while the computer is turned on.
- Clean the CD-ROM or DVD-ROM.
- Check the speaker volume.

When I click an application icon a message appears, such as "You must insert the application CD into your CD-ROM drive," and the software does not start

- Some titles require specific files that are located on the application's CD-ROM. Insert the disc and try starting the program again.
- Make sure you place the disc in the tray with the label side facing up.

I hear the noise while playing back music

- If you are using Windows Media Player, please use MediaBar software.

My floppy disk drive cannot write to a diskette

- If the diskette is write-protected, disable the write-protect feature or use a diskette that is not write-protected.
- Check that the diskette is properly inserted into the floppy disk drive.

My speakers have no sound

- If the built-in speakers are turned off, press Fn+F3 to turn on the speakers.
- If the speaker volume is turned to the minimum, press Fn+F4 to increase volume.
- If your computer is powered by a battery, check that the battery pack is inserted properly and that it is charged.
- If you are using an application that has its own volume control, check that the volume is turned up.
- Check the volume controls in Windows® Millennium Edition.
- If you connect external speakers, check that the speakers are properly connected and the volume is turned up. If the speakers have a mute button, make sure it is off. If the speakers are powered by batteries, check that the batteries are inserted properly and that they are charged.
- If you have connected an audio cable to the Headphone connector, disconnect the cable.

My modem does not work

- Check that the phone line is plugged into the line jack. See "Connecting a Phone Line" on page 35 for details.
- Check that the phone line is working. You can check the line by plugging in an ordinary phone and listening for a dial tone.
- Check that the phone number the program is dialing is correct.
- Check that the software you are using is compatible with the notebook modem. (All preinstalled programs are compatible.) Call the software publisher or Sony Customer Support.

My modem connection is slow

The computer's modem uses V.90 technology. Many factors 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, check the following:

- ❑ Have your phone company check that your phone line is free from any line noise.
- ❑ If your problem is fax-related, check that 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 Internet Service Provider (ISP), check that the ISP is not experiencing technical problems.
- ❑ If you have a second phone line available, try connecting the modem to that line.

My microphone does not work

If you are using an external microphone, check that the microphone is plugged into the Microphone connector. See "Connecting an External Microphone" on page 46 for details.

My mouse does not work

- ❑ If you are using an external mouse, check that the mouse is plugged into the mouse connector. See "Connecting an External Mouse or Keyboard" on page 44 for details.
- ❑ If you connected an external mouse while your computer is on, you must restart your computer.
- ❑ If you are using an optional Sony USB mouse PCGA-UMS1 series, check that the mouse is plugged into the USB connector.

I cannot use DV devices. The message "DV equipment seems to be disconnected or turned off" appears.

- ❑ Check that the DV device is turned on and that the cables are properly connected.
- ❑ If you are using multiple i.LINK® devices, the combination of the connected devices may cause unstable operation. In this case, turn off the power to all connected devices and disconnect unused devices. Check the connection, then turn on the power again.

My touchpad interprets a single tap as a double-click

Click the Mouse icon in the Control Panel and then change the button assignments in the Mouse Properties dialog box. One of the buttons is assigned to the double-click action.

My computer does not shut down

It is best to shut down your computer using the Shut Down command on the Windows Start menu. Using other methods, including those listed here, may result in loss of unsaved data. If the Shut Down command does not work properly, follow these steps:

- Restart the computer by pressing Ctrl+Alt+Delete. If this does not work, press the power button and hold it for at least four seconds to turn off the power.
- Unplug the computer from the AC adapter and remove the battery pack from your computer.

My PC card is not working

- Make sure the PC card is compatible with Windows®.

The sound of my computer's fan is too loud

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

I cannot print

- Your connected printer may not function after the computer resumes from a power-saving mode. When this occurs, follow the procedures below to reset the printer connection:
  1. Right-click the My Computer icon on the desktop, and then select Properties.
  2. Click the Device Manager tab.
  3. Select Refresh, and then click OK. The printer should now function properly.

Power Management

The operating system may become unstable if a lower power state such as hibernation is initiated and then changed before the operating system completely enters the lower power state. To restore the computer to its normal operating stability, close all open applications, press the power button, and hold it for four seconds or more to completely shut down the computer.

My computer does not enter the power saving mode I selected

Confirm the current power management settings:

1. Click Start, point to Program>Accessories>System Tool>System Information.

   The Help and Support window appears.

2. From the Tool menu select System Configuration Utility.

3. The System Configuration Utility window appears.

4. Choose the General tab and click Adanced.

   The Advanced Troubleshooting Settings window appears.

5. Verify that Deep Sleep, Standby, and Hibernation are enabled.

To enable Deep Sleep check Enable Deep Sleep; to enable Standby and/or Hibernate features click the Enabled button (enable button only appears when Stanby/Hibernate are disabled).

Restart your computer. Deep Sleep, Standy and Hibernation will be enable on your next startup.

Frequently Asked Questions (FAQs)

Q: *How do I recover applications or drivers that came with my computer if the files are corrupted or deleted?*
A: The Application Recovery CDs allow you to reinstall individual applications and device drivers if they are corrupted or accidentally erased. Reinstalling an individual device driver or software title may correct a problem you are experiencing with your computer, and you may not need to recover the entire contents of your hard drive. If you do need to reinstall all the software titles that shipped with your computer, use the System Recovery CD(s).

You must be in Windows® to run the Application Recovery CD(s). The application will not run from DOS. If you have any questions on using the Application Recovery CD(s), contact Sony Customer Support.

To use the Application Recovery CD(s)

1. Turn on your computer. If your computer is already on, close all applications.
2. When the Windows desktop appears, insert the Sony Application Recovery CD in the CD-ROM drive. The Application Recovery utility loads automatically.
3. When the Application Recovery menu appears, follow the on-screen instructions to complete the recovery process.

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

Q: *Why isn't the CD-ROM drive reading a CD?*
A: After inserting a CD, you must wait a few seconds for the disc to be detected before trying to access it. If your drive reads some CDs but not others, check the shiny side of the disc for dirt or scratches. You may also need to clean the CD-ROM drive lens with a CD-ROM cleaner.

Q: *How do I change the video resolution of my display?*
A: From the Start menu, select Settings and click Control Panel. Click the Display icon and select Settings. Move the Screen area slider to change the resolution.

Q: *Why does Windows lock up during shut down?*
A: Windows may not shut down properly for many reasons, including incompatible or conflicting drivers, damaged files, or non-responsive hardware. For troubleshooting information, you can search Windows Me Help. From the Start menu, select Help, click the Contents tab, click Troubleshooting, and then click Windows Me Troubleshooters. Click the subject for which you want information, and then answer the questions that are appropriate for your problem.

Q: *Why is my system running slowly?*
A: The speed varies depending on the number of applications that are open and running. Close any applications that you are not currently using.

Q: *Why is there no sound in any application?*
A: There are independent controls for your system volume.

- When the internal speaker is set to Mute, press the F3 key while holding down the Fn key.
- To increase the volume, press the F4 key while holding down the Fn key.

Using the System and Application Recovery CDs

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

Using the System Recovery CD(s)

You can reinstall software titles that shipped with your computer if they are corrupted or accidentally erased. You may not need to recover 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 applications or device drivers. See "Using the Application Recovery CD(s)" on page 72.

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

The System Recovery utility gives you three options:

- **Full Restore without Format** restores all the software titles that originally came with your computer without formatting the hard disk. Microsoft Word® 2000 must be restored from the enclosed CD-ROM.
- **Full Restore with Format** formats the hard disk drive and then restores all the original software. If your hard drive is partitioned into C and D drives, the computer offers you the option to reformat the drive into a single partition. Microsoft Word® 2000 must be restored from the enclosed CD-ROM.
- **Operating System Only** restores the Windows® operating system, the notebook utility programs, and the device drivers that shipped with your computer.

If you choose the Full Restore with Format or Operating System Only option, your hard disk will be formatted, which removes all the information on the hard disk drive. You will lose any software you have installed and any other files you have created since you started to use your computer. This means you will have to reinstall any applications that were not included with the computer when you purchased it. If you choose the Full Restore without Format option, you may need to reinstall applications that were not included with the computer when you purchased it. If you have any questions on using the System Recovery CD, contact Sony Customer Support.

To use the System Recovery CD(s)

1. Insert the Sony System Recovery CD in the CD-ROM or DVD-ROM drive.

> The System recovery utility boots from the CD-ROM or DVD-ROM drive. It must be in the CD-ROM or DVD-ROM drive when you turn on the computer.

2. Shut down your computer as described in "Shutting Down Your Computer" on page 17.
3. Wait four seconds and turn on your computer.
4. Click OK to signify you have read and accept the Microsoft® End-User License Agreement.
5. When the System Recovery menu appears, follow the on-screen instructions to complete the recovery process.

> Your system may include one or two System Recovery CDs. If you have two 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 30 to 60 minutes to complete.

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 menu screen appears.
3. Press the arrow keys to select the Exit menu.
4. Press the arrow keys to select Get Default Values and then press the Enter key. The message "Load default configuration now?" appears.
5. Check that Yes is selected, then press the Enter key.
6. Press the arrow keys to select Exit (Save Changes) and then press the Enter key. The message "Save configuration changes and exit now?" appears.
7. Check that Yes is selected, then press the Enter key. The computer restarts from the Recovery CD.

Using the Application Recovery CD(s)

The Application Recovery CD(s) allows you to reinstall individual applications and device drivers if they are corrupted or accidentally erased. Reinstalling an individual device driver or software title may correct a problem you are experiencing with your computer, and you may not need to recover the entire contents of your hard drive. If you do need to reinstall all the software titles that shipped with your computer, use the System Recovery CD(s). See "Using the System Recovery CD(s)" on page 70.

You must be in Windows® to run the Application Recovery CD. The application will not run from DOS. If you have any questions on using the Application Recovery CD, contact Sony Customer Support.

To use the Application Recovery CD(s)

1. Turn on your computer. If your computer is already on, close all applications.
2. When the Windows® desktop appears, insert the Sony Application Recovery CD in the CD-ROM or DVD-ROM drive. The Application Recovery utility loads automatically.
3. When the Application Recovery menu appears, 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 two Application Recovery CDs. If you have two Application Recovery CDs, insert the first CD to run the Application Recovery program. You may be prompted to insert the second CD, depending on the application you wish to restore.

Recovering Microsoft® Word 2000

If you recover your operating system using the System Recovery CD, Microsoft Word 2000 will not be recovered. Use the supplied Word 2000 CD-ROM to recover this application.

Supplementary Information

Hard Drive Partition

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. DVgate Motion saves files to the D partition. This prevents large video captures from consuming the available space on your C partition. To maintain optimum performance of DVgate Motion, you should defragment or format the D partition regularly. The size of the D partition is approximately 7.2 GB* (PCG-F630) or 3.6 (PCG-F610)*.

* The size of your D partition may differ if you purchased a specially configured system.

Power Management Tips

- ❑ If you find that an application exhibits unexpected behavior (such as reduced video quality) after returning from a reduced power consumption mode, you should close that application before your computer enters a power-saving mode.
- ❑ If your battery level falls to less than 10 percent, you should either attach the AC adapter to recharge the battery or shut down your computer and insert a fully charged battery.

If Your Computer Does Not Start

- ❑ Check that the computer is plugged into a power source and that it is turned on. Check that the power indicator on the front panel of the computer indicates that the power is on.
- ❑ Check that the battery is inserted properly and that it is charged.
- ❑ Make sure there is no diskette in the floppy disk drive.
- ❑ Confirm that the AC adapter and all cables are connected firmly, as described in "Connecting Peripheral Devices" in the *VAIO® Notebook User Guide* that came with your computer.

- If you plugged the computer into a power strip or UPS, make sure the power strip or UPS is turned on and working.
- If you are using an external display, check that it is plugged into a power source and turned on. Check that the brightness control is adjusted correctly. See the manual that came with your display for details.
- Moisture condensation may have occurred. Do not use the computer for at least one hour and then turn on the computer.
- When the internal backup battery is low on power, it may not be able to start your system properly and the message "Press <F1> to resume, <F2> to setup" will appear at the bottom of the display. Should this happen, follow the procedure below:

  1. Press F2. The BIOS Setup menu appears.
  2. Set the date (month/day/year). Press Enter to move to the next item. To enter 01/31/2000, for example, type 1, press Enter, type 31, press Enter, Type 2000, then press Enter.
  3. Press ↓ to select System Time, then set the time (hour:minute:second). Press Enter to move to the next item.
  4. Press Esc to select Exit, press ↓ to select Get Default Values, and then press Enter. The message "Load default configuration now?" appears.
  5. Make sure that Yes is selected and press Enter. If No is selected, press ← to select Yes.
  6. Select Exit (Save Changes), then press Enter. The message "Save configuration changes and exit now?" appears.
  7. Make sure that Yes is selected and press Enter. The computer restarts.

DVgate and Digital Video Captures

If your system displays the message, "Failed to record to DV deck, Please check deck's power status, cable connection and so on.", while you are recording images to a digital video device using DVgate, close all open applications, and restart your computer. Frequent recording of images to a digital video device while using DVgate sometimes causes this to occur.

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

Switching Between NTSC and PAL Standards

Your computer is designed to allow you to switch between NTSC and PAL standards. For details on switching from one standard to another, go to Ask Sony at http://www.sony.com/pcsupport.

Applications That Use the TWAIN Driver

Digital imaging applications, such as Adobe PhotoDeluxe®, allow you to transfer images to your notebook from an external device, such as a scanner or digital camera. When you select a device, a TWAIN driver window appears on the screen. You should always close the TWAIN driver window before exiting or minimizing a digital imaging application.

Using the Touchpad

In addition to using the left and right buttons for mouse clicks, you can tap on the touchpad to indicate mouse clicks. By default, the tapping feature is disabled. If you wish to turn on the tapping feature, double-click the Mouse icon in the Control Panel, select the Tapping tab, and click the check box to enable tapping.

Hardware Temperature

The bottom panel of your computer or the AC adapter may become warm. This is the result of CPU operation and does not indicate a malfunction of the computer. The actual temperature varies depending on the peripherals and software you are using and the length of time that the unit is in use.

Do not cover the computer or adapter with clothing, blankets, or any other material when the computer is turned on. Covering these components may result in damage to your unit.

Notes on Setup

- Do not place your computer in a location subject to:
  - Heat sources, such as radiators or air ducts
  - Direct sunlight
  - Excessive dust
  - Moisture or rain
  - Mechanical vibration or shock
  - Strong magnets or speakers that are not magnetically shielded
  - Ambient temperature of more than 95º F (35º C) or less than 18º F (10º C)
  - High humidity
- Do not place electronic equipment near your computer. The computer's electromagnetic field may cause a malfunction.

- Provide adequate air circulation to prevent internal heat buildup. Do not place your computer on porous surfaces such as rugs or blankets, or near materials such as curtains or draperies that may block its ventilation slots. Leave a space of at least 8 inches (20 cm) behind the back panel of the computer.
- If the computer is brought directly from a cold location to a warm one, moisture may condense inside your computer. In this case, allow at least an hour before turning on your computer. If any problems occur, unplug your computer, and contact your Sony Service Center.
- The computer uses high-frequency radio signals and may cause interference to radio or TV reception. Should this occur, relocate the computer a suitable distance away from the set.
- Use only specified peripheral equipment and interface cables; otherwise, problems may result.
- Do not use cut or damaged connection cables.
- Your computer will 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).
- If the telephone company makes a service call to your home or office and determines that your computer is responsible for a problem, the telephone company may bill you for the service call. Also, if you do not disconnect your computer when it is adversely affecting the telephone line, the telephone company has the right to disconnect your service until you correct the problem.

Handling Your Notebook

- Clean the cabinet with a soft, dry cloth or a soft cloth lightly moistened with a mild detergent solution. Do not use any type of abrasive pad, scouring powder, or solvent such as alcohol or benzine, as these may damage the finish of your computer.
- Should any solid object or liquid fall into the computer, shut down your computer and then unplug it. You may want to have the computer checked by qualified personnel before operating it any further.

Do not drop the computer or place heavy objects on top of the computer.

Adding Memory

In the future you may want to install memory modules to expand the functionality of your computer. Your system comes with 64 MB of installed memory (64 MB x 1). By inserting optional memory modules in your computer's expansion slot, you can increase the memory up to 256 MB (128 MB x 2). 64 MB and 128 MB expansion memory modules are available as optional memory modules. For memory upgrades, use only PC-100 SDRAM SO-DIMM (gold lead contacts). Sony computer supplies, accessories, and peripherals can be purchased from your Sony-authorized dealer or by contacting Sony at http://www.sony.com/accessories.

The size of your memory may differ if you purchased a specially configured system.

Make sure you observe the proper safety precautions when you install memory modules in your computer. See the bulleted list below. Be careful when adding memory. Mistakes when installing or removing a memory module may cause a malfunction.

- 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.
- Disconnect the system from its power source and from any telecommunications links, networks, or modems before you open the system or follow any of the procedures described below. Failure to do so may result in personal injury or equipment damage.
- Electrostatic discharge (ESD) can damage memory modules 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.

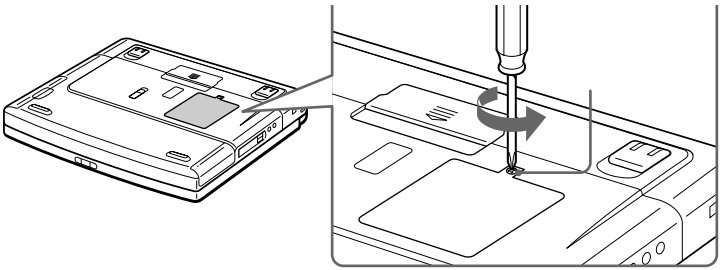
- Do not open the memory module package until you are ready to install the module. The package protects the module from ESD.
- Use the special bag for preventing ESD or use aluminum foil when you store the memory module.

Typical expansion memory configuration

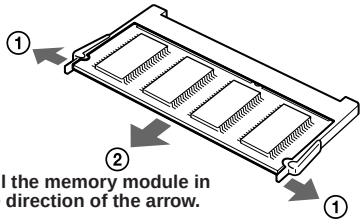
Total System Memory (MB)	Slot 1 (MB)	Slot 2 (MB)
128	64	64
192	64	128
256	128	128

To remove a memory module

1. Shut down your computer and disconnect all peripheral devices, such as your printer.
2. Unplug the computer and remove the battery packs.
3. Wait until the computer cools down. Then unscrew the screw at the bottom of your computer. Loosen the screw with an appropriate screwdriver.



4. Touch a metal object (such as the connector panel on the back of your computer) to discharge static electricity.
5. Remove the memory module.

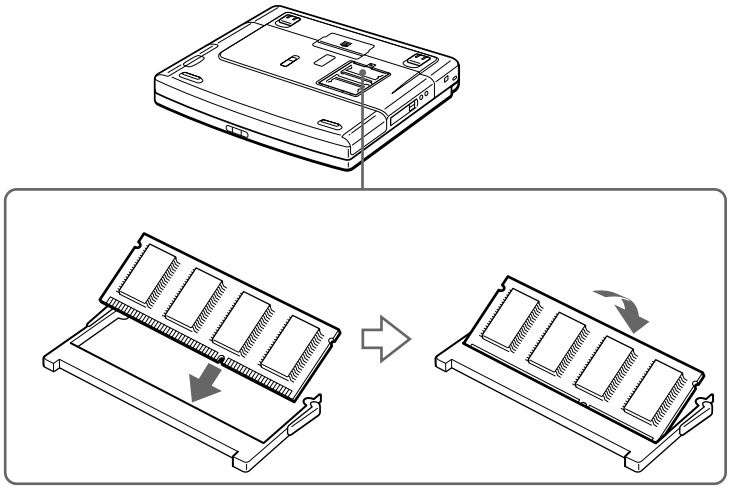


6. Tighten the screw on the bottom of the computer.

Your computer comes with a memory module installed in the memory slot. To upgrade your memory you may need to remove this module from the slot before installing your upgrade memory.

To install a memory module

1. Follow steps 1 to 4 of "To remove a memory module."
2. Remove the memory module from its packaging.
3. Install the memory module.



1 Slide the memory module into the slot. **2 Press the module into place until it clicks.**

4. Tighten the screw on the bottom of the computer.

Specifications

Model	PCG-F630	PCG-F610
Processor	Mobile AMD-K6®-2+ 550MHz*	Mobile AMD-K6®-2+ 550MHz*
Hard Disk Drive	12.0 GB†	6.0 GB†
Standard RAM	64 MB SDRAM, expandable to 256 MB	
LCD Screen	13.3" XGA TFT	12.1" SVGA TFT
L2 Cache Memory	128 KB (on die)	
MPEG	MPEG1 and MPEG2	MPEG1
Graphics	Trident CyberBlade™i7 3D graphic accelerator with shared video memory	
Sound Capabilities	16-bit CD-quality stereo sound	
Diskette Drive	3.5" 1.44 MB	
DVD-ROM Drive	Reads CD data from 10.3X to 24X variable transfer rate.** Reads DVD data from 1.7X to 8X variable transfer rate.††	
Laser Diode Properties	CD-ROM: Wavelength 785nm; laser output 3.97 µW DVD-ROM: Wavelength 780 nm and 650 nm; laser output 30.2µW	
Modem	V.90/K56flex™ technology compatible modem***	
Expansion Capabilities	Type II PC cards and Type III PC card Card Bus support	
Built-in Capabilities	Stereo speakers Touchpad	
Telecommunication Capabilities	Data and fax send/receive***	
Connection Capabilities	2 USB ports i.LINK††† Serial port Keyboard/mouse (PS/2® style) VGA monitor Parallel (printer) Phone line (RJ-11) Microphone Headphone Port replicator	
Supplied Accessories	Rechargeable battery AC adapter and power cord	
Power Requirements	64.35 watts maximum (19.5V DC/AC 100-240V)	
Power Management	Energy Star compliant Advanced Configuration and Power Interface (ACPI)	
Battery	Lithium-ion	
Dimensions	12.7"(w) x 1.9"(h)**** x 10.4"(d) (324 x 47.4 x 265.5 mm)	

Model	*PCG-F630*	*PCG-F610*
Weight	7.0 lbs. (3.2 kg) (with battery and floppy disk drive)	6.9 lbs. (3.2kg) (with battery and floppy disk drive)
Operating Temperature	41º F to 95º F (+5º C to 35º C) temperature gradient less than 18º F (10º C) per hour	
Operating Humidity	20% to 80% (not condensed), provided that humidity is less than 65% at 95º F (35º C), hygrometer reading of less than 84º F (29º C)	
Storage Temperature	-4º F to 140º F (-20º C to 60º C), temperature gradient less than 18º F (10º C) per hour	
Storage Humidity	10% to 90% (not condensed) provided that humidity is less than 20% at 140º F (60º C), hygrometer reading of less than 95º F (35º C)	

* MHz denotes microprocessor internal clock speed; other factors may affect application performance.

† The size of your hard disk may differ if you purchased a specially configured system. GB means one billion bytes when referring to hard drive capacity. Accessible capacity may vary.

** Data on a CD-ROM is read at a variable transfer rate, ranging from 10.3X at the innermost track to 24X at the outermost track (the data transfer standard 1X rate is 150 kbytes/s). The average data transfer rate is 17.2X or 2580 kbytes/s.

†† Data on a DVD-ROM is read at a variable transfer rate, ranging from 1.7X at the innermost track to 4X at the outermost track (the data transfer standard 1X rate is 1392 kbytes/s). The average data transfer standard is approximately 2.85X or 3823 kbytes/s. A DVD-ROM drive reads data on a CD-ROM at a variable transfer rate, ranging from 10.3X at the innermost track to 24X at the outermost track. The average data transfer rate is approximately 17.15X or 2936 kbytes/s or 2576 kbytes/s.

***Maximum speed for faxing is 14.4 kbps. Your modem is capable of downloading at maximum of 53 kbps. Your online service or Internet Service Provider, however, may not support this technology or operate at this speed.

†††i.LINK is a trademark of Sony used only to designate that a product contains an IEEE 1394 connector. All products with an i.LINK connector may not communicate with each other.

**** Height measured at thickest point. Thinnest height is 34.0 mm (1.34”).

Specifications are subject to change without notice.

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