

SONY®

***VAIO® Notebook User
Guide***

**PCG-FX210
PCG-FX215**



Notice to Users

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Owner's Record

The model number and serial number are located on the bottom of your Sony CLICK TO UPDATE ProductName. Refer to the model and serial number when you call your Sony Service Center.

Model Numbers: PCG-961A, PCG-962A

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 drive: Danger - Visible and invisible laser radiation when open. Avoid direct exposure to beam.

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

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 gaz vous êtes près de la fuite.
- ❑ L'appareil doit être le plus près possible d'une prise murale pour en faciliter l'accès.



Pour changer la pile de recharge, 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.

**Pour les lecteur DVD-ROM:
Danger : Radiation laser visible et invisible si ouvert. Évitez l'exposition directe au faisceau.**

Attention : Afin de réduire les risques d'incendie, n'utilisez qu'un cordon de communication NO. 26 AWG ou plus gros.

If you have questions about this product, you can reach the Sony Customer Information Service Center at 1-888-4SONYPC; or write to the Sony Customer Information Service Center at 12451 Gateway Blvd., Ft. Myers, FL 33913 or find Sony Customer Service on the web at: <http://www.sony.com/pcsupport>

Regulatory Information

Declaration of Conformity

| | |
|--------------------|-----------------------|
| Trade Name: | SONY |
| Model No.: | PCG-961A, PCG-962A |
| Responsible Party: | Sony Electronics Inc. |

| | |
|----------|---|
| Address: | 680 Kinderkamack Rd. Oradell, NJ 07649 |
|----------|---|

| | |
|------------|---|
| Telephone: | 201-930-6972 (For FCC-related matters only.) |
|------------|---|

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.
- (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, you can reach the Sony Customer Information Service Center at 1-888-4SONYPC; or write to the Sony Customer Information Service Center at 12451 Gateway Blvd., Ft. Myers, FL 33913 or find Sony Customer Service on the web at: <http://www.sony.com/pcsupport>

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 Chaudière, Tour centrale
1 promenade du Portage, 5 étage Hull
PQ K1A 0N2.

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

Cet appareil 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 0.2.

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 combinaison 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 0.2.

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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 **CLICK TO UPDATE** ProductName, see “Specifications”

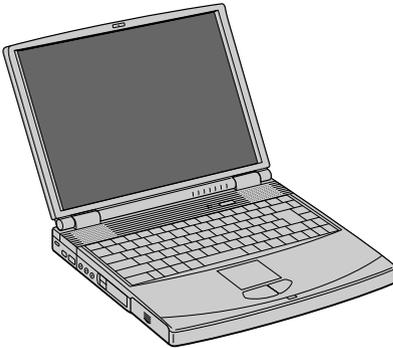
- ❑ **Exceptional performance** — Your notebook includes a mobile AMD Duron™ processor and a V.90 compatible K56flex modem.*
- ❑ **Portability** — Rechargeable battery pack provides hours of use without AC power.
- ❑ **Sony audio and video quality** — High-quality MPEG1/MPEG2 video, which supports full-screen 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.
- ❑ **Microsoft® Windows® operating system** — Your system includes Microsoft® Windows® Millennium Edition (Windows Me™)
- ❑ **Communications** — Access popular online services, send e-mail, browse the Internet, and use fax features.
- ❑ **Optical drive (DVD-ROM)** — The DVD-ROM drive plays both DVD-ROM and CD-ROM discs.

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

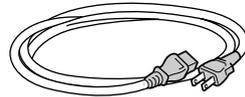
Unpacking Your Notebook

Remove the following hardware items from the box:

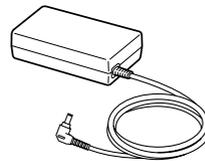
Main unit*



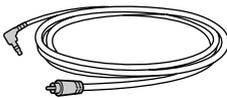
Power cord



AC adapter



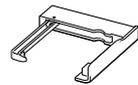
Video cable



Rechargeable battery pack



Weight saver



* Removable floppy disk drive is in the multipurpose bay.

Manuals

- ❑ **VAIO® Quick Start** — Contains information on unpacking and setting up your notebook, supplementary updates, and software information.
- ❑ **Microsoft® Windows® Millennium Edition Getting Started manual** — Explains how to use the basic features of this latest Windows operating system.

Software CDs

- ❑ **Microsoft® Word 2000** — Allows you to reinstall Microsoft Word to the VAIO notebook you purchased.

Recovery CDs

- ❑ **System Recovery CD(s)** — Allows you to restore the software titles that shipped with your computer if they become corrupted or are erased. It can only be used to restore the hard disk of the VAIO notebook you purchased.
- ❑ **Application Recovery CD(s)** — Allows you to reinstall individual applications or device drivers if they become corrupted or erased.
- ❑ **Driver Recovery CD(s)** — Allows you to reinstall individual device drivers. Use it to restore corrupted or erased files.

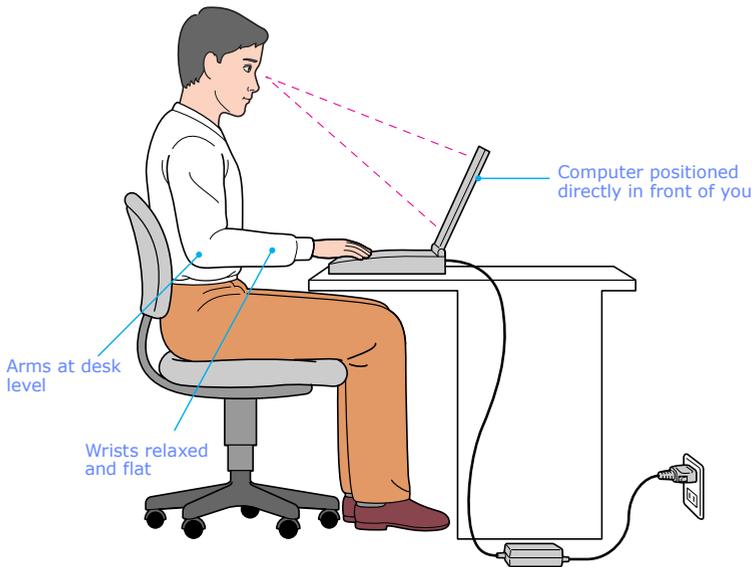
Other

- ❑ 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.

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 95° F (35° C) or less than 40° F (5° 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.
- ❑ 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.

Cleaning Your Notebook

- ❑ Make sure to disconnect the power cord before cleaning the computer.
- ❑ Avoid rubbing the LCD screen as this can damage the screen. Use a soft, dry cloth to wipe the LCD screen.
- ❑ Clean the computer with 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.

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.

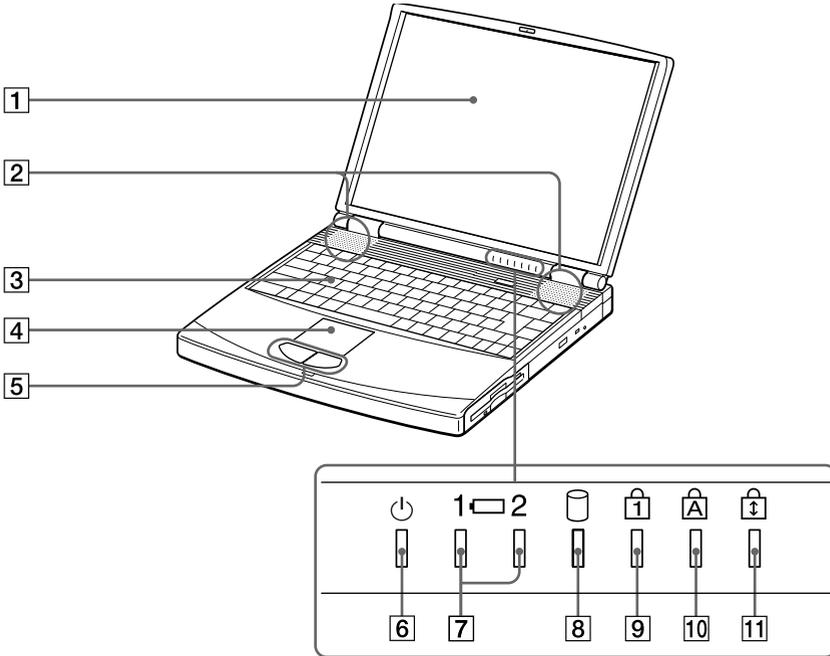
Setting Up Your VAIO® Notebook



This section describes all the controls and connectors on your computer, how to connect your computer to a power source, and how to start and shut down your computer.

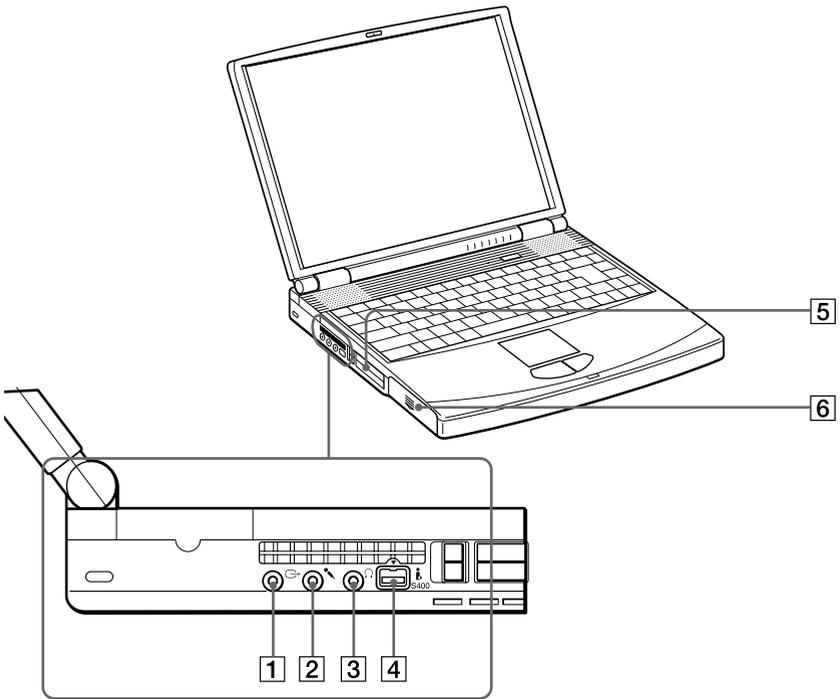
Locating Controls and Connectors

Front



| | | | |
|----------|--|-----------|-----------------------------------|
| 1 | LCD (Liquid Crystal Display) screen | 7 | Battery 1 and 2 indicators |
| 2 | Speakers | 8 | Hard disk drive indicator |
| 3 | Keyboard | 9 | Num Lock indicator |
| 4 | Touchpad | 10 | Caps Lock indicator |
| 5 | Left/right buttons | 11 | Scroll Lock indicator |
| 6 | Power indicator | | |

Left



1  *Video out*

4  *i.LINK® (IEEE1394) S400 connector*

2  *Microphone connector*

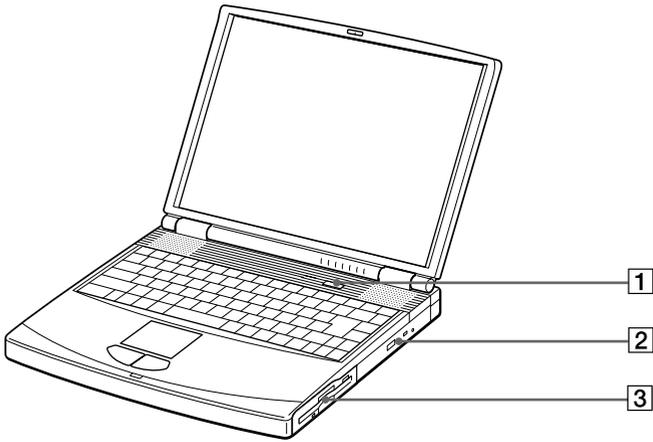
5 *PC card slots*

3  *Headphone connector*

6 *Battery bay*

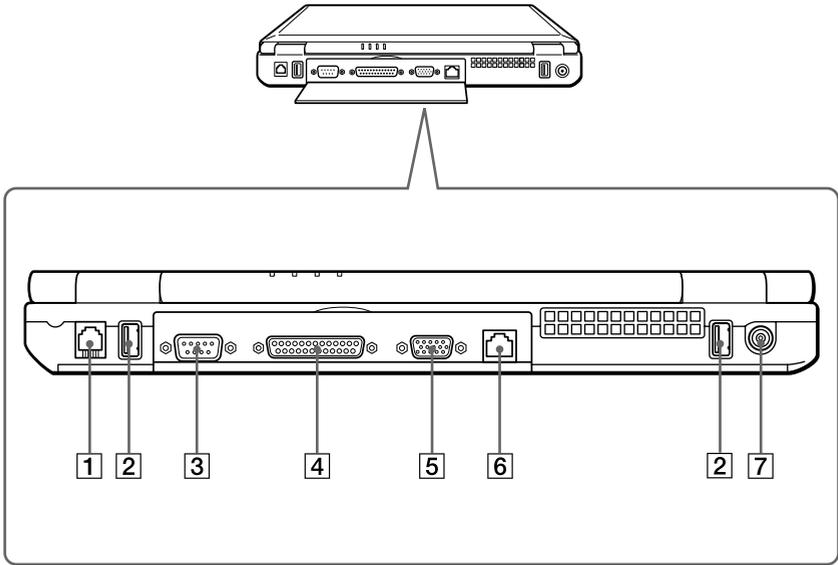
* i.LINK is a Sony trademark used only to designate that a product contains an IEEE 1394 connector. All products with an i.LINK connector may not communicate with each other.

Right



-
- | | |
|----------|---|
| 1 | <i>Power button</i> |
| 2 | <i>Optical drive (DVD-ROM drive)</i> |
| 3 | <i>Floppy disk drive</i> |
-

Back



| | | | |
|---|-------------------|---|--------------------|
| 1 | Modem jack | 5 | Monitor connector |
| 2 | USB connectors | 6 | Ethernet connector |
| 3 | Serial connector | 7 | DC In connector |
| 4 | Printer connector | | |



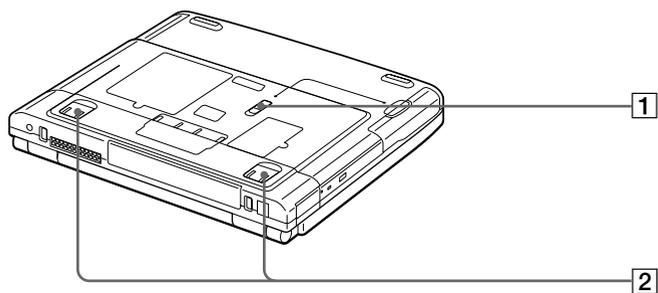
Warning:

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



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

Bottom



1 *Multipurpose bay RELEASE lever*

2 *Tilt stands*

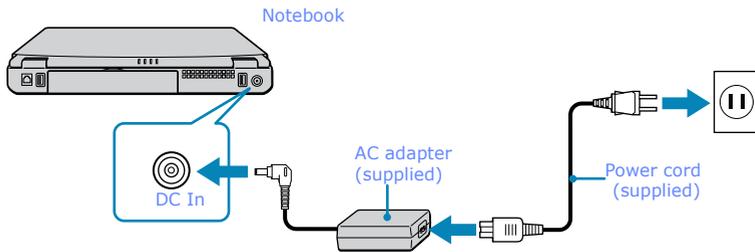
Connecting a Power Source

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.

Connecting the AC adapter



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.
- ❑ The LED indicator on the AC adapter may be turned on until the AC adapter is unplugged from your notebook.
- ❑ 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 one or two battery packs as a source of power. The second battery pack inserts into the multipurpose bay on the right side of the computer (see “Using a Second Battery Pack”). Additional battery packs are available as a separate option.

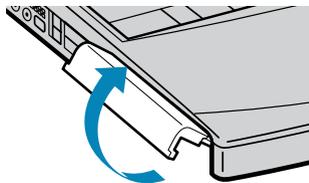
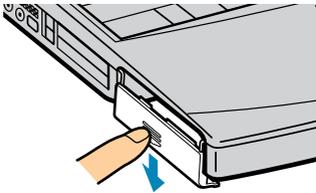
The battery pack that comes with your computer is not fully charged at the time of purchase. Follow the steps below to insert and charge the battery pack.

To insert the battery pack

- 1 To open the battery bay, press cover down.

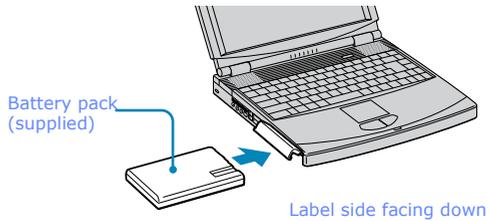
 Cover swings out but does not detach.

Battery bay



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

Inserting battery pack



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

To charge the battery pack

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

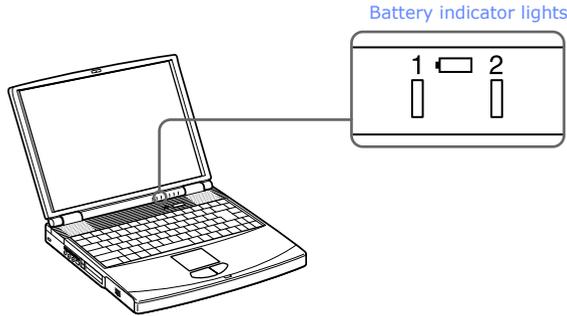
The computer automatically charges the battery (the battery indicator light flashes in a double blink pattern as the battery charges).

- 3 When the battery is 85% full, the battery indicator light turns off. This process takes approximately 2 hours if your notebook's power is on.

 To charge the battery completely, continue charging for an additional hour.

There are two battery indicator lights on the computer

Battery indicator lights



Battery Indicator

Description

| | | |
|---|--|--|
| 1 | | <i>Indicates the status of the battery pack in the battery bay on the left side of the computer.</i> |
| 2 | | <i>Indicates the status of the battery pack in the multipurpose bay on the right side of the computer.</i> |

Battery Indicator

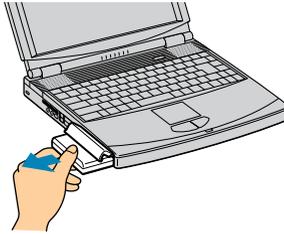
Light Status Description

| | |
|----------------------------|--|
| <i>On</i> | <i>The computer is using battery power.</i> |
| <i>Single blink</i> | <i>The battery is running out of power.</i> |
| <i>Double blink</i> | <i>The battery is charging.</i> |
| <i>Off</i> | <i>The computer is using AC power.</i> |

To remove the battery pack

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

Removing the battery pack



- 3 Close the cover of the battery bay.



You will 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 a power-saving mode

Notes on the battery

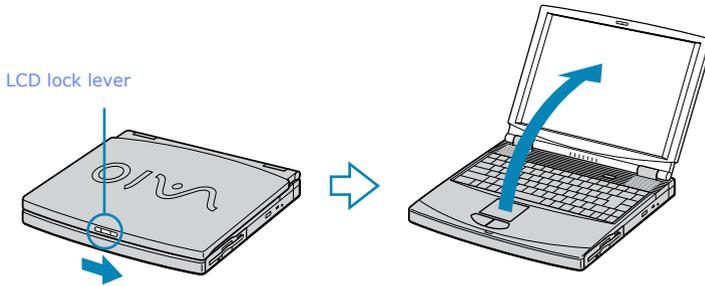
- ❑ To determine the remaining battery charge, see “Displaying Battery Information.”
- ❑ When the battery power is running low, both the battery and power indicators blink.
- ❑ When the computer is directly connected to AC power and has a battery pack in the battery bay, it uses power from the AC outlet.
- ❑ See “Using a Second Battery Pack” for information on installing and charging a battery pack in the multipurpose bay.
- ❑ 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.
- ❑ If the battery level falls below 10%, you should either attach the AC adapter to recharge the battery or shut down your computer and insert a fully charged battery.

- ❑ You can extend battery life by changing the power-management modes in the PowerPanel utility. See “Power Saving Modes” .
- ❑ 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.
- ❑ For some software applications and some peripheral devices, your computer may not enter Hibernate mode when the battery life is low. To avoid loss of data when using battery power, you should save your data frequently and manually activate a power-management mode, such as Standby or Hibernate.
- ❑ 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.

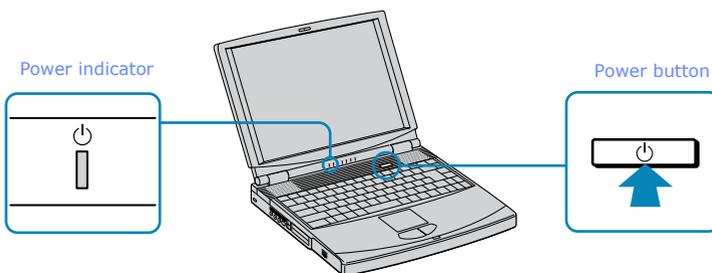
Opening the computer



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

 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 VAIO original hardware functions such as Power Management tools, the scroll function of the touchpad, and keyboard shortcut key combined with Fn key.

Power button



 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 as follows:
- ❑ To decrease brightness, press Fn+Shift+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—power indicator turns off.
- 6 Turn off any peripherals connected to your computer.

 During a period of inactivity, you can conserve battery life by using Standby mode.

If you are unable to shut down your computer.

- 1 Close or end all operations as follows:
 - Close all applications.
 - Remove the PC cards.
 - Disconnect USB devices.
- 2 Restart the computer. You can restart your computer by pressing Ctrl+Alt+Delete keys (at the same time).

 If you are still unable to shut down the computer, you can press the power button and hold it for 5 seconds. This operation may result in data loss.

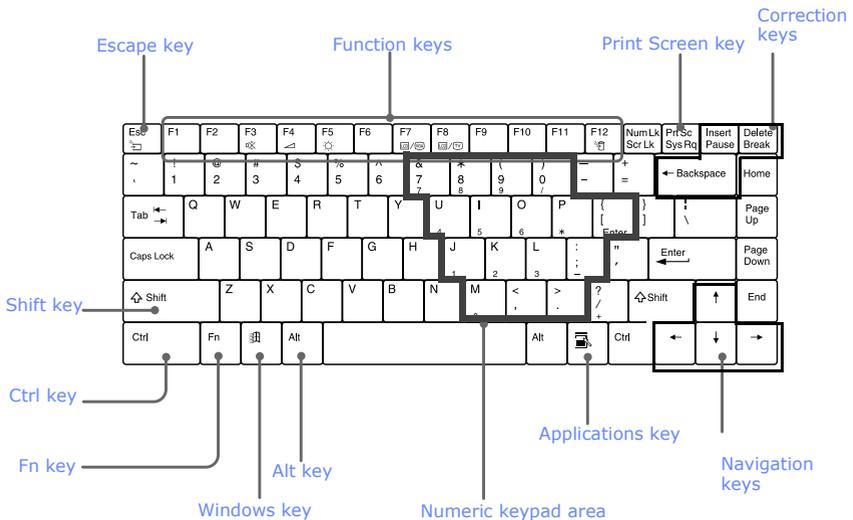
Using Your VAIO® Notebook



Using the Keyboard

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

Keyboard



| 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. |

| Key | Description |
|---|--|
| 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. |
| 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 38. |
| 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 40. |
| 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: Computer window where you can locate other computers. This is the equivalent of selecting Find and then Computer from the Start menu. |

| <i>Combination</i> | <i>Function</i> |
|---|---|
|  + 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

| <i>Indicator</i> | <i>Function</i> |
|--|---|
| Power  | Light is green when the power to the computer is turned on, flashes amber in Standby mode, and turns off when the computer is in Hibernate mode or powered off. |
| Battery 1 1  | Indicates the status of the battery inserted in the battery bay on the left side of the computer. |
| Battery 2  2 | Indicates the status of the battery inserted in the multipurpose drive bay on the right side of the computer. |
| Hard disk  | Lights when data is being read from or written to the hard drive. Do not enter Standby mode or turn off the computer when this indicator light is on. |

Lights

| <i>Light</i> | <i>On</i> | <i>Off</i> |
|--------------|--|--|
| 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

| <i>Combinations/ Feature</i> | <i>Function</i> |
|--|--|
| Fn+  (ESC) Standby | Puts the system into Standby mode, a power-management state. To return the system to the active state, press any key or press the power button on your computer. |
| Fn+  (F3) Mute | Toggles the built-in speaker off and on. |
| Fn+  (F4) Speaker volume | Adjusts the built-in speaker volume. To increase volume, press Fn+F4. |
| Fn+Shift+  (F4) Speaker volume | Adjusts the built-in speaker volume. To decrease volume, press Fn+Shift+F4. |
| Fn+  (F5) Brightness control | Adjusts the brightness of the LCD. To increase light intensity, press Fn+F5. |
| Fn+Shift+  (F5) Brightness control | Adjusts the brightness of the LCD. To decrease light intensity, press Fn+Shift+F5. |

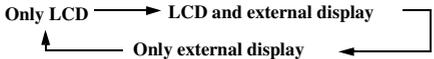
Combinations and Functions with the Fn Key (Continued)

**Combinations/
Feature**

Function

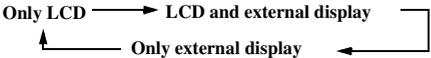
Fn+ **LCD** / **VGA**
(F7)
Switch to the
external monitor/
LCD

Toggles through the LCD, external display (connected to the Monitor connector) and both LCD and external display.



Fn+ **LCD** only/
TV (F8)
Control TV out

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



Fn+ **z** (F12)
Hibernate

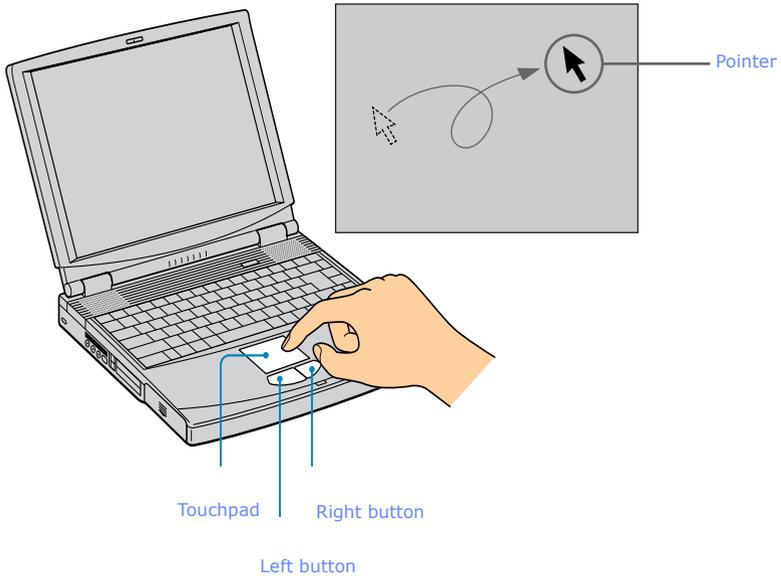
Hibernation mode: Provides for the lowest level of power consumption. When you execute this command, the state of the system and state of the peripheral devices are written to the hard disk and the system power is turned off. To return system to its original state, use the power button to turn on power.

 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.

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.) |

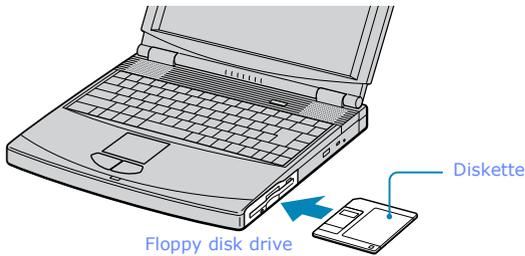
 See Mouse Properties for information on touchpad features, such as clicking both buttons simultaneously, adjusting touchpad speed, and Easy Launcher functions. To access Mouse Properties, click the Start button, point to Settings, point to Control Panel, and then click the Mouse icon in the Control Panel.

Using the Floppy Disk Drive

Your computer comes with the floppy disk drive in the multipurpose bay.

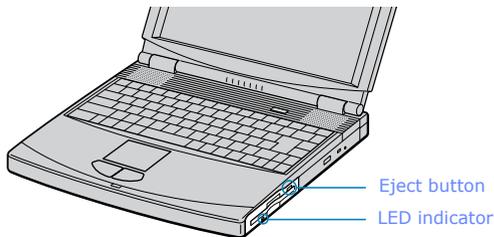
To insert a diskette

- 1 Hold the diskette 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.

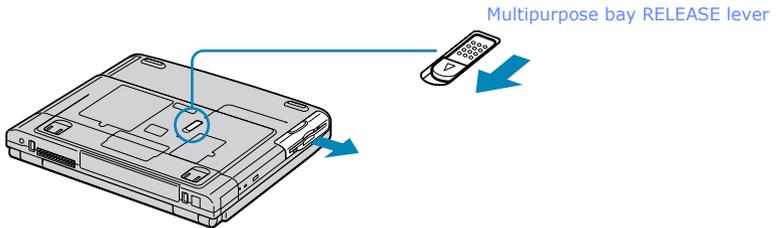


 Do not push the eject button when the LED indicator is turned on. Otherwise, data may be lost.

To remove the floppy disk drive

- 1 Turn off the computer.
- 2 There is a RELEASE lever on the bottom of the computer. Slide this lever in the direction of the arrow.

Multipurpose bay release lever



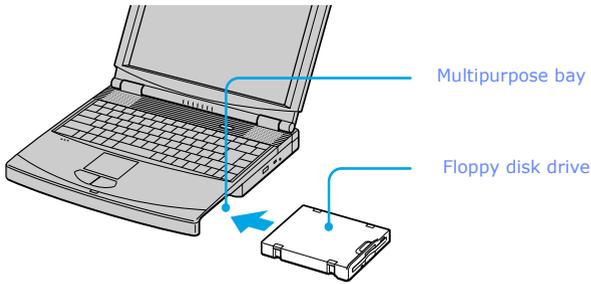
- 3 Slide the drive out of the multipurpose bay.
- 4 Insert the weight saver. See “Using the Weight Saver” on page 58.

To reinsert the floppy disk drive

- 1 Turn off the computer.
- 2 If another device is in the multipurpose bay, remove the device. See “To remove the second battery pack” on page 57.

- 3 Insert the floppy disk drive into the multipurpose bay with the VAIO label facing up. Continue pushing the drive into the bay until the RELEASE lever locks into place.

Inserting the floppy disk drive



Using the Optical Drive

Your computer comes with an optical drive (DVD-ROM drive).

To insert a disc

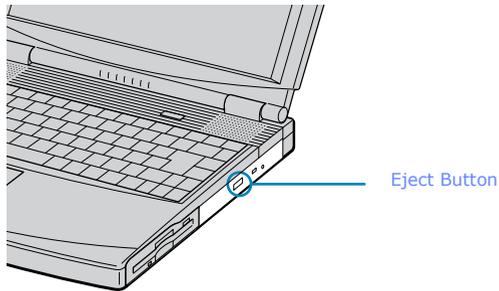
- 1 Turn on the computer.

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

- 2 Press the Eject button to open the DVD-ROM drive.

The tray slides out.

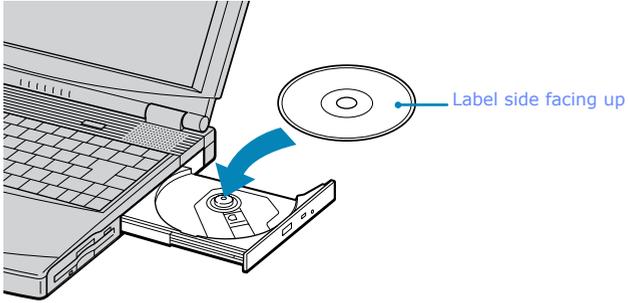
Ejecting the tray



- 3 Place an optical disc on the tray with the label side facing up. For DVDs which can be played on both sides, the side of the disc facing up is the side that plays.

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

Inserting an optical disc



5 Close the tray by pushing it gently.

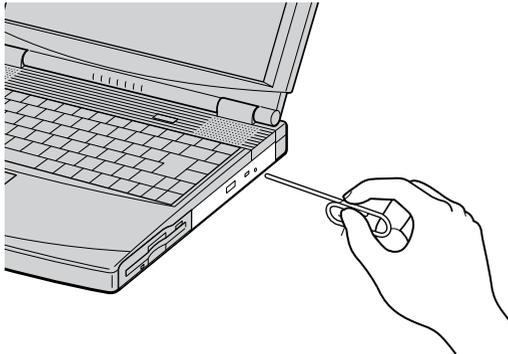
 Be sure to seat the disc firmly over the hub fingers. If you do not seat the disc firmly, you could damage your optical drive and you may not be able to open the tray.

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

When the computer is in power saving modes, you cannot remove a 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.

Manual eject hole



Playing a DVD

To achieve optimum performance when playing DVDs, it is recommended that you close any open applications before playing a DVD movie.

- You can play DVDs using the DVD-ROM drive and the WinDVD® software. See the help file that comes with the WinDVD software for details.



Some discs recorded at 20 or 24 bits may produce noise while playing. If you have audio devices connected, this may cause damage to your hearing and the speakers. Reduce the volume before playing such discs.

If you have connected a TV, follow the instructions in “Selecting the Display Mode” .

 If you set the display resolution higher than the default setting (1024 x 768, 16 bits), the DVD video may not play properly.
To view the DVD video clearly, set the display resolution to 1024 x 768 dots (16 bits).



Do not switch the power saving modes while you are playing the DVD disc.

Change the setting to disable the screen saver and the virus checker (if it is active).

Do not use memory-resident utility software to speed up disc access. This may cause the computer to malfunction.

Notes on CD and DVD media

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

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 a network.

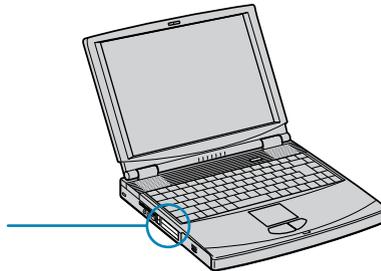
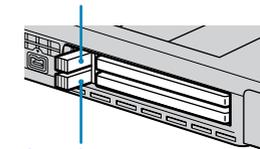
 The PC card slots can accommodate two Type I/II PC cards, or one Type III PC card. These slots are compatible with CardBus. Use the lower slot for Type III PC cards. You do not need to shut down your notebook before inserting or removing a PC card.

To insert a PC card

- 1 Push the Release button once. The Release button pops out.

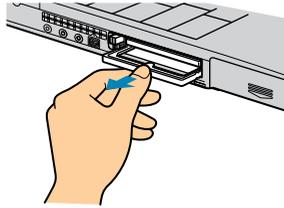
PC card release button

Release button



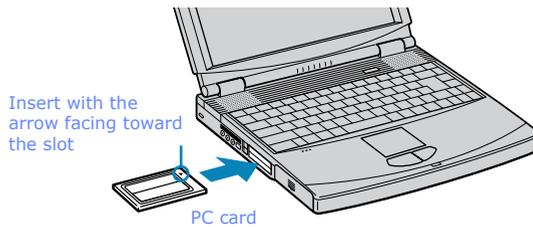
- 2 Push the Release button a second time. The PC card slot protector pops out.
When you use a Type III PC card, you need to remove both the top and bottom PC card slot protectors.

PC card slot protector



- 3 Insert the PC card into the PC card slot. Make sure the front label of the PC card is facing up.
- 4 Push the the PC card slot gently into the connector. The PC card is automatically detected by your system. The  (Unplug or Eject Hardware icon) appears in the taskbar.

Inserting a PC card



Do not force a PC card into the slot as this may damage the connector pins. Do not carry your computer while touching the head of a PC card (such as a wireless LAN card), pressure or shock may damage the connector pins.

To remove a PC card

 If your computer is turned off, you do not have to follow these instructions.

- 1 Double-click  in the taskbar. The “Unplug or Eject Hardware” dialog box appears.
- 2 Select the hardware device you wish to remove.
- 3 Click Stop. In the “Stop a Hardware device” dialog box, confirm that the device can be safely removed from the system.
- 4 Click OK. The message, “PC Card can now be safely removed from the system” appears.
- 5 Click OK again and click Close.
- 6 Push the Release button. The Release button pops out.
- 7 Push the Release button a second time. The PC card pops out. Gently grasp the card and pull it out of the slot.
- 8 Insert the PC card slot protector into the empty slot.

Notes on using PC cards

- ❑ For some PC cards, if you alternate between normal power operation and the Standby or Hibernate 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.
- ❑ 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 orienting the card correctly. See the manual that came with your PC card for more information on use.

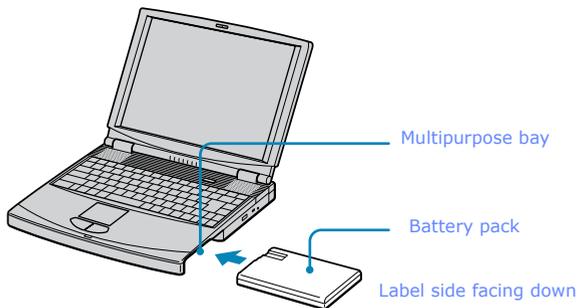
Using a Second Battery Pack

You can purchase a second rechargeable battery pack. With two battery packs, you can extend the time that you use your computer with battery power. When using two battery packs, the battery pack you insert first charges first. The battery pack you insert second charges when the first battery pack is 85 percent full. You can monitor which battery pack is charging by observing the battery indicator lights.

To insert a second battery pack

- 1 If another device is in the multipurpose bay, remove the device.
- 2 Insert the battery pack into the multipurpose bay.
If the battery is being used, the battery 2 indicator light turns on.

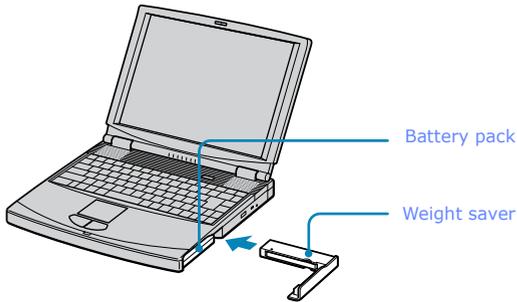
Second battery in multipurpose bay



- 3 Attach the weight saver to the computer to stabilize the battery pack. There is a RELEASE lever on the bottom of the weight saver. Slide the lever toward the front of the computer to lock the weight saver. See also “Using the Weight Saver” on page 58.

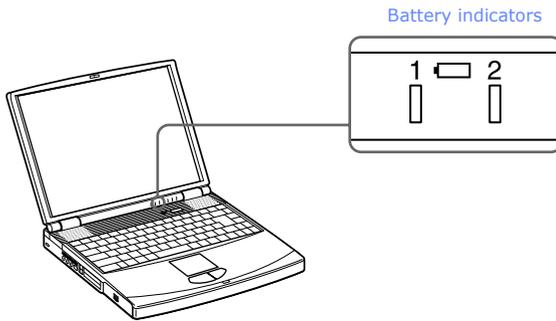
To charge the second battery pack

Using weight saver for second battery cover



Keep the battery pack in the computer while it is connected to AC power. The battery indicator flashes while the battery is charging. See also “To charge the battery pack” for more information.

Charging the second battery

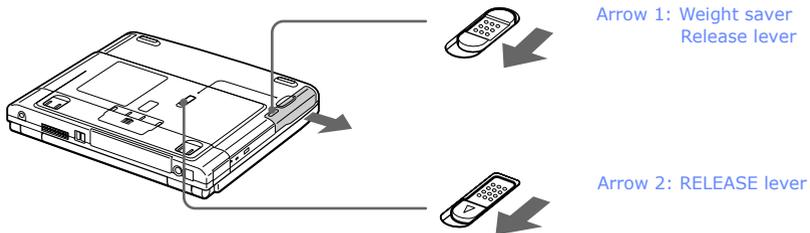


To remove the second battery pack

If you attach two battery packs, you can remove either of them without shutting down the computer. When removing one battery pack, make sure that the other battery pack's indicator light is on. If the indicator light of the battery pack you are removing is on, right-click the battery icon on the task tray and click the "Switch discharge battery" option.

- 1 There is a Release lever on the bottom of the weight saver. To remove the battery pack, slide this lever in the direction of arrow 1, then slide the RELEASE lever on the bottom of the computer in the direction of arrow 2.

Multipurpose bay release levers



- 2 Remove the weight saver, and then pull out the battery pack.
- 3 Reinsert the weight saver. See "Using the Weight Saver" on page 58.

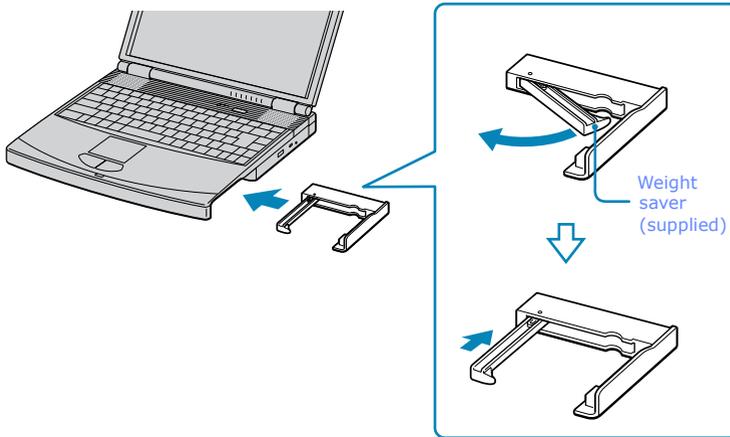
Using the Weight Saver

The weight saver protects the multipurpose bay when it is empty.

To attach the weight saver

- 1 If another device is in the multipurpose bay, remove the device. See “To remove the second battery pack” on page 57.
- 2 Fold out the hinged arm of the weight saver and then push on the hinged arm to lock it into place. Slide the weight saver in the direction of the arrow until it clicks.

Inserting the weight saver



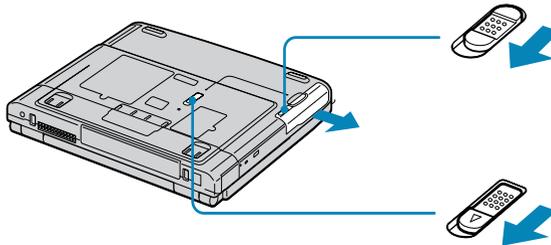
- 3 Manually lock the weight saver's Release lever.

To remove the Weight Saver

- 1 There is a release lever on the bottom of the weight saver. To remove the weight saver, slide this lever in the direction of arrow 1, then slide the Release lever on the bottom of the computer in the direction of arrow 2.

Multipurpose bay release levers

Arrow 1: Weight saver Release lever

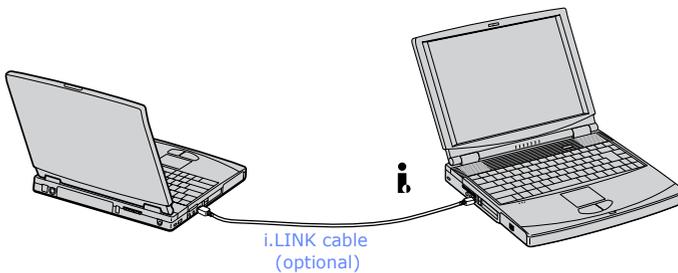


- 2 After removing the weight saver, pull out the weight saver's hinged arm and fold it into the weight saver.

Connecting With Another VAIO® Computer

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



See Smart Connect online help for more information.

 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>).

* i.LINK is a Sony trademark 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.

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 Hibernate. When using battery power, be aware that the computer automatically enters Hibernate mode when the remaining battery charge drops below 5 percent, regardless of the power management setting you select.

 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

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

Standby Mode

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

To activate Standby mode

To activate Standby mode, press the key combination Fn+Esc, or press the power button and release it immediately.

To return to normal mode

Press any key to return to normal mode.

Hibernate Mode

In the Hibernate 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 Hibernate mode

To activate Hibernate mode, press the key combination Fn+F12.

 Do not move the notebook until its power indicator light turns off.

To return to normal mode

To return to normal mode, turn on the computer by pressing the power button. The computer returns to its previous state.

 When returning from Hibernate 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 required to return to normal mode
Standby requires less time than Hibernate to return to normal mode.
- Power consumption
Standby uses more power than Hibernate.

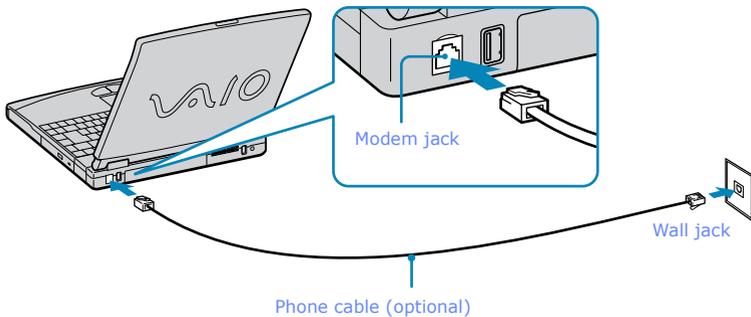
Connecting a Phone Line

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 modem jack on the computer.

Connecting phone cable



- 2 Plug the other end into the wall jack.

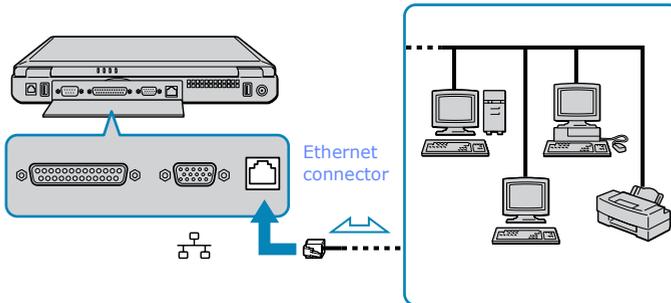
 Your computer does not work with party lines, cannot be connected to a coin-operated telephone, and may not work with multiple phone lines or a private branch exchange (PBX). Some of these connections may result in excess electrical current and could cause a malfunction in the internal modem.

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

Connecting to a Local Area Network (LAN)

You can connect your computer to 10BASE-T and 100BASE-TX-type networks. For the detailed settings and devices needed to connect to a network, ask your network administrator.

Connecting to LAN



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

Note that if you enable Wake on LAN, the power saving mode will be switched to Standby mode.

Setting Up Your Ethernet Connection

- 1** Right-click Network Neighborhood and select Properties.
- 2** Click Add to add a client, adapter, protocol, or service.
- 3** Click File and Print Sharing to enable these functions.
- 4** Select a Primary Network Logon.
- 5** Click the Identification tab to set the computer name, workgroup, and computer description.
- 6** Click the Access Control tab to set the share level or user level access control.

Connecting Peripheral Devices



You can add functionality to your computer by connecting a variety of peripherals, as discussed in the following sections.

- “Connecting a Printer”
- “Connecting an External Display”
- “Connecting a TV Display”
- “Connecting a Universal Serial Bus (USB) Device”
- “Connecting an i.LINK® Device”
- “Connecting External Speakers”
- “Connecting an External Microphone”

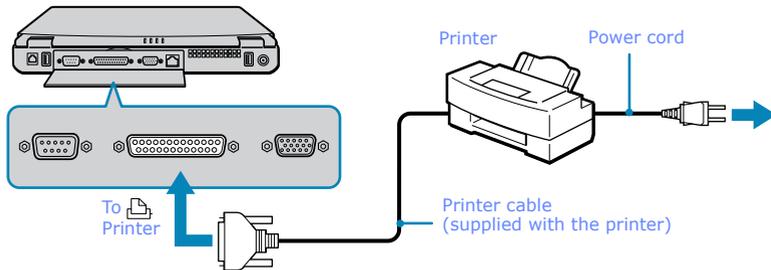
Connecting a Printer

You can connect a Windows Me application compatible printer to your computer to print documents.

To connect a printer

- Locate the Printer connector identified by the  symbol. Plug the printer cable (supplied with the printer) into this port on the computer.

Printer connector



 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 "Troubleshooting the printer".

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:

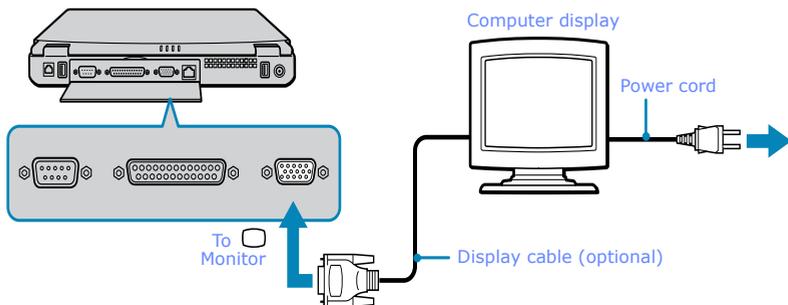
- ❑ Computer display (monitor) (See page 69.)
- ❑ Multimedia computer display (See page 70.)
- ❑ Projector (See page 70.)

 Connect an external display before you turn on the computer.

To connect a computer display

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

Connecting an external computer display



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

To connect a multimedia computer display

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

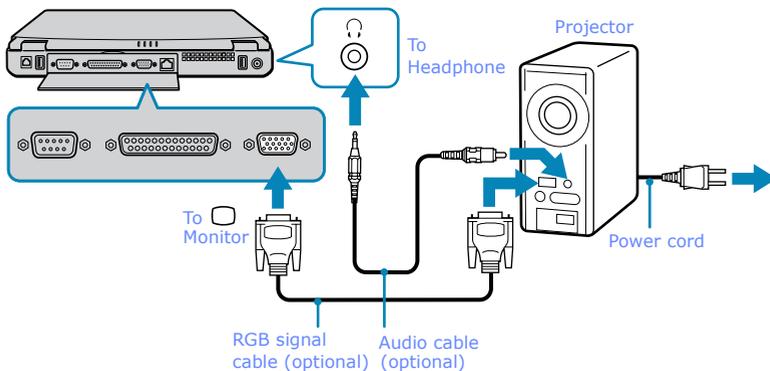
- 1 Locate the Monitor connector identified by the  symbol. Plug the display cable into this connector.
- 2 Locate the Headphone connector identified by the  symbol. Plug the speaker cable into this connector.
- 3 Locate the Microphone connector identified by the  symbol. Plug the microphone cable into 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.

Connecting a projector



 See the manual that came with your projector for more information on its 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 a display. See also “Selecting the Display Mode” for more information.

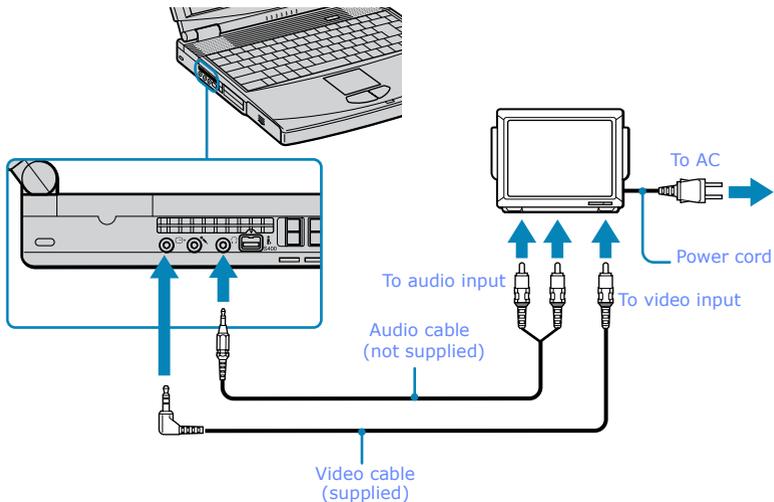
| <i>To</i> | <i>Press</i> | <i>Result</i> |
|-------------------------------|--------------|---|
| Switch to an external display | Fn+F7 | Toggles between the LCD, the external display connected to the Monitor connector, or both the LCD and external display. |

```
graph LR; A[Only LCD] --> B[LCD and external display]; B --> C[Only external display]; C --> A;
```

Connecting a TV Display

You can enjoy playing audio/video by connecting AV devices to your computer. See also the manuals supplied with your AV devices.

To Connect a TV



-  See the manual that came with your peripheral device for more information on installation and use.
-  If you insert a DVD in your DVD drive to watch a video on your TV, the Fn+F8 key combination might not activate the function to toggle between your LCD and TV. Take the following steps:
 1. Connect the TV to the Computer.
 2. Restart the computer and wait until it finishes.
 3. Toggle between your LCD and your TV with the Fn+F8 key combination.Your image is now displayed on both LCD and TV. Re-insert your DVD to launch your DVD software.

Connecting a Universal Serial Bus (USB) Device

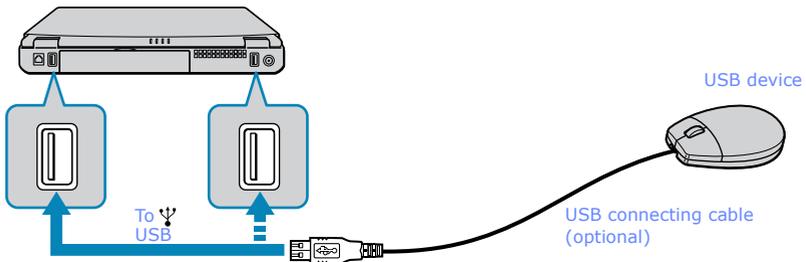
You can connect USB devices such as an external mouse, keyboard, speaker, and microphone to your computer.

To connect a USB device

 The following steps describe the procedure for connecting a USB mouse to your computer. Use the same procedure for connecting all USB devices.

- Locate the USB device identified by the  symbol. Plug one end of the USB cable into this port and the other end into the USB device.

Connecting USB device to USB connector



You can use an optional Sony USB mouse PCGA-UMS1 series (not supplied) with this computer. Since the USB mouse software driver is preinstalled in the computer, you simply plug the USB mouse into the USB connector to use it. One USB connector supports one USB device.

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

Connecting an i.LINK[®]* Device

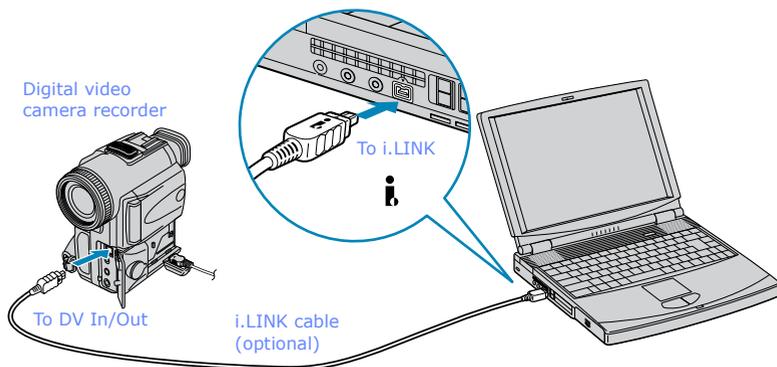
You can connect an i.LINK enabled digital video camera recorder to the i.LINK[®] S400  (IEEE1394) connector.

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.

 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), and 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 Web site (<http://www.sonydirect.com>), or by calling 1-888-315-7669 (toll free).

Connecting digital video camera recorder to i.LINK connector



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

 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 external device.

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.

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.

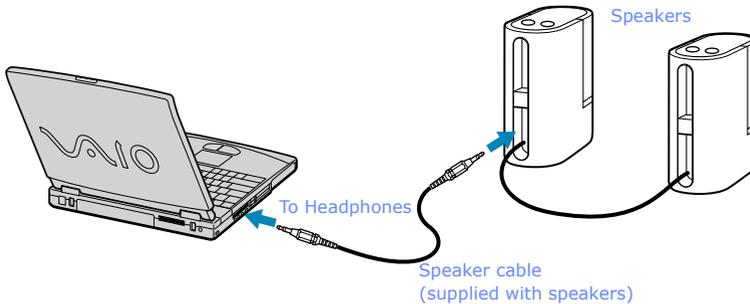
Turn down the volume of the speakers before you turn them on.

Do not place diskettes on the speakers; the speakers' magnetic field may damage the data on the diskettes.

To connect external speakers

- Locate the Headphone connector identified by the Ω symbol on the side of the computer. Plug the speaker cable into this connector.

Connecting speakers to the headphone connector



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

Connecting an External Microphone

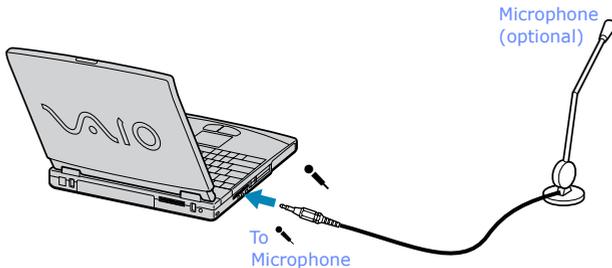
You can enhance the quality of sound input by using an external microphone.

- ✎ 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

- Locate the Microphone connector identified by the  symbol on the side of the computer. Plug the microphone cable into this connector.

Connecting microphone to microphone connector



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

Customizing Your VAIO® Notebook



You can customize the settings of your notebook. The following sections briefly describe how to change your computer's default settings.

Selecting the Display Mode

This notebook uses the ATI video controller. You can select which display is used when the notebook is connected to an external monitor. When you connect an external display, you can switch the display mode between your notebook's LCD display and the external monitor.

- 1 Click the Start button, point to Settings, and then point to Control Panel.
- 2 Click the Display icon. The Display Properties window appears.
- 3 Click the Settings tab, and then click the Advanced button. The ATI RAGE MOBILITY-M1 AGP Properties dialog box appears.
- 4 Click the Displays tab and select the display settings by clicking the  icon on the panel of your display choice. For more information, click the Help button.

 If you cannot see your movie or DVD on the external display, change the monitor or TV setting by clicking on the Secondary  icon and changing it to Primary  .

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

Turn on the computer after you turn on the peripheral devices.

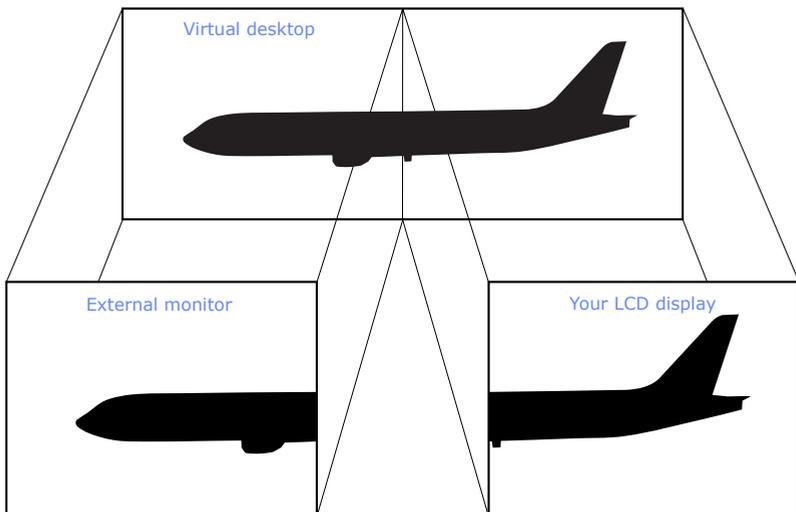
ATI RAGE MOBILITY-M1 Screen



Using the Dual Display function

The dual display function allows you to distribute portions of your desktop across separate displays. For example, if you have an external display attached to the monitor connector, your notebook's LCD display and the external display can function as a single desktop. You can move the cursor off of one display and onto the other. This allows you to drag objects, such as an open application window or a toolbar, from one display to the other. This configuration of a single desktop distributed across separate displays is referred to as a virtual desktop.

Virtual desktop



Selecting Dual Display mode

- 1 Click the Start button on the Windows taskbar.
- 2 Point to Settings > Control Panel.
- 3 Click the Display icon. The Display Properties windows appears.
- 4 Click the Settings tab.
- 5 Click the Monitor marked “2”. The Monitor #2 dialog box appears.
- 6 Click Yes to enable the second display.
- 7 Click Apply.

Setting the colors and resolution for each display

You can set the display colors and resolution for each display that is part of a virtual desktop.

Follow steps 1 to 4 above to display the Display Properties screen. Select the display you wish to change (1 or 2) by clicking on the icon of the display. You can change colors by selecting an option from the Colors list. Use the slider in the screen area to change the resolution. Click OK or Apply. Click OK to confirm that you want to make the changes.

Customizing the virtual desktop

You can customize Dual Display mode by changing the position of the two displays that form the virtual desktop.

In the Display Properties screen, drag the icons of Monitor #1 or Monitor #2, to a new position that is relative to the other. The two display icons must be connected to create a virtual desktop. Click OK to apply the change.

Releasing the Dual Display setting

Follow steps 1-4 in the section “Selecting Dual Display mode”. Right-click on Monitor #2, and then click on Enabled to release the setting.

 Some software is not compatible with Dual Display mode.

Changing the Window Design of Sony Software

To change the window design

- 1 Click the Start button, point to Settings, then point to Control Panel.
- 2 Click UI Design Selector.
- 3 Click << or >> and select the desired design.
- 4 Click Apply.
- 5 The “UI Design Selector” window design changes. The window design for your Sony software will match the “UI Design Selector” window.
- 6 To try another selection, click << or >> then click OK.
- 7 The UI Design Selector closes and the Sony software window design displays.



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

Adding Memory

In the future you may want to install memory modules to expand the functionality of your computer. You can increase memory up to 256 MB (128 MB x 2), by installing optional memory modules. The amount of memory pre-installed is 128 MB (128 MB x 1). You can add an expansion memory module (64 MB or 128 MB) in the memory module bay. Expansion memory modules are available as options. For memory upgrades, use only PC100 (CL2) SDRAM SO-DIMM (gold lead contacts).



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.

Before you start

- ❑ The procedures described below assume you are familiar with the general terminology associated with personal computers and with common safety practices required for using and modifying electronic equipment.
- ❑ Disconnect your 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. Personal injury or equipment damage may result from failure to take these precautions.
- ❑ 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.

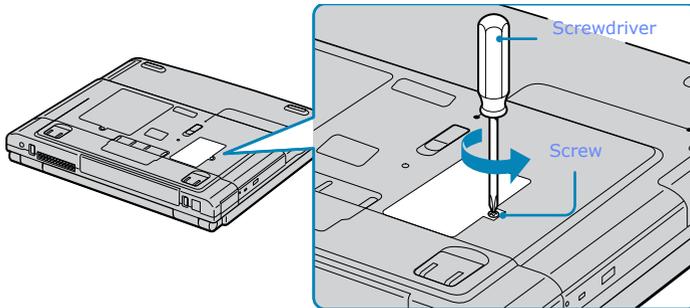
Typical expansion memory configuration

| Total System Memory (MB) | Slot 1 (MB) | Slot 2 (MB) |
|--------------------------|-------------|-------------|
| 192 | 128 | 64 |
| 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 pack(s).
- 3 After the computer has cooled, loosen and remove the screw that secures the cover of the memory bay on the bottom of your computer. Use an appropriate screwdriver.

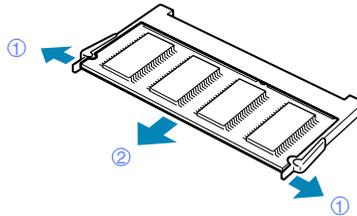
Removing the memory module cover



- 4 Touch a metal object (such as the connector panel on the back of your computer) to discharge any static electricity.

5 Remove the memory module.

Removing memory module



① Pull the tabs in the direction of the arrows.
The memory module is released.

② Pull the memory module in
the direction of the arrow.

6 Tighten the screw on the memory bay cover.

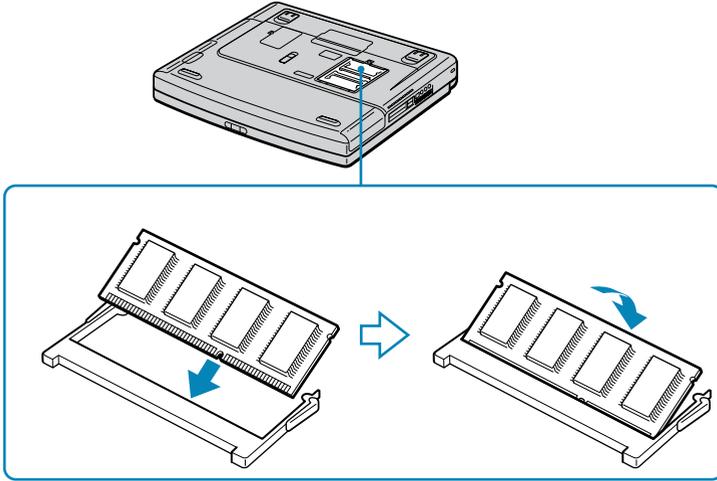
 Your computer comes with a memory module installed in the memory slot. To upgrade your memory, remove this module from the slot before installing your upgrade memory module.

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.

Installing 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 cover of the memory bay.

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 the following:

- ❑ An overview of the various software that come with your computer and the activities you can perform with your software
- ❑ Software support information
- ❑ Details on your Sony application and system recovery CDs

Overview

Adobe® Acrobat Reader™

Adobe Systems Inc.

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 Inc.

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, Inc.

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

ArcSoft PhotoPrinter® 2000 Pro

ArcSoft, Inc.

ArcSoft PhotoPrinter 2000 is an easy-to-use, advanced printing program that lets you quickly lay out 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 you the ability to add text to any image.

CompuServe® 2000

CompuServe

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 Inc.

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, 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 Inc.

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.

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

Microsoft® Word 2000

Microsoft Corporation

Microsoft Word 2000 makes it easy to create shared 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 simple to create multilingual documents.

MovieShaker™

Sony Electronics Inc.

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

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.

OpenMG Jukebox™

Sony Electronics Inc.

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

PictureGear™

Sony Electronics Inc.

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

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® 2001

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 Inc.

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.

VisualFlow[®]

Sony Electronics Inc.

VisualFlow is a state-of-the-art Sony multimedia browser designed specifically for Memory Stick media. It displays any still pictures, movie, or sound files stored in a Memory Stick media in a visually pleasing, artistic manner. VisualFlow not only plays a selected movie or sound file, but also enables playback of files by other applications like PictureGear, Memory Stick Slideshow, and Windows Explorer.

WinDVD[®] 2000

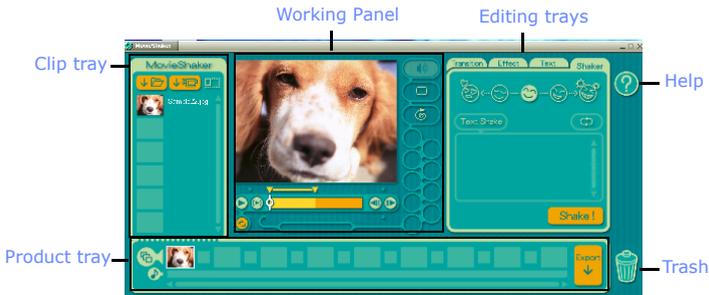
InterVideo, Inc.

WinDVD is a simple-to-use DVD player combining all the features you would expect to find in a standard consumer DVD player, in addition to some very advanced functionality, such as full VCD 2.0 support, full precision video decode, a choice of user interfaces, and video display options. You can play DVD titles or Video CDs. WinDVD automatically determines the type of disc in the DVD drive and uses the correct playback method.

MovieShaker™

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  (File Import) or  (DV Import).
- 2 Find the file you want to add.
- 3 Select the file.
- 4 Click Open. The file is added to the Clip tray.

 Importing files over 75 seconds in length may cause MovieShaker software to stop responding.

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.

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. Limit the number of scenes placed on the Product tray to 10 or less. MovieShaker software may stop responding if too many scenes are placed 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. MovieShaker can play video files up to 65 MB in length.



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

PictureGear™

PictureGear software is a digital image management application that allows you to see all the images stored in any directory on your computer. Thumbnail views provide quick reminders of your pictures. Brighten, contrast, enhance, resize, crop, and color-correct your pictures. Create panoramic views, animations, screen savers, wallpaper, still pictures from MPEG, and even html photo albums.

Managing Your Pictures

Use the collection feature to manage your pictures.

- 1 Click the Folder tab and browse to locate your pictures.
- 2 Select the pictures you want to have in a collection.
- 3 From Collection menu, select Create New Collection.
- 4 Enter a name for the collection and then click okay.

Creating a Photo Album

- 1 Select the pictures you want to use to make an album.
- 2 From the Utilities menu, select Album Maker.
- 3 Choose the type of Album you want and click Okay.
- 4 Now add more pictures, frames, text, and effects.
- 5 When you are finished, select Create Album in File menu or click the Create Album icon on the toolbar.
- 6 Designate the folder you where want to save the Album.
- 7 Enter the Target Album name, select Thumbnails and click Okay.
- 8 The new album can be viewed using most internet browsers.

Using Panorama Maker

Panorama Maker stitches a group of still images into a 360 degree panoramic picture. The source images should be the same size and overlap 20%.

How to stitch a panoramic picture:

- 1 Gather the source images into the same folder or collection.
- 2 Select the images you want to use.

 We recommend 12 landscaped or 16 portrait pictures.

- 3 From the Utilities menu select Panorama Maker.
- 4 Select the correct lens and click Okay. (If 35mm lens is selected the prompt, does not appear; to select a different lens, click the lens icon.)
- 5 Click the panoramic icon, near the bottom of the window.
- 6 Click Full Stitch.

Making Still Images and Panoramic from MPEG

- 1 Select the MPEG file.
- 2 From the Movie/Sound menu, select Scene break down.
- 3 Then select Movie Stitch, to create a panoramic picture.

OpenMG Jukebox 2.0 Software Instructions

OpenMG Jukebox 2.0 is a software application that utilizes Sony Corporation's copyright protection technology. OpenMG Jukebox 2.0 maintains the holder's copyrights by preventing unauthorized distribution of digital audio files.

OpenMG Jukebox 2.0 software enables you to play and record audio CDs and import digital audio files. When recording an audio CD with OpenMG Jukebox 2.0, it is encoded in ATRAC3 format onto your computer's hard drive. By downloading digital audio files from EMD services, the downloaded and imported data can then be played on your computer or transferred to external devices/media while maintaining the copyright information of the contents. OpenMG Jukebox 2.0 converts your existing MP3 and WAV format audio files into OpenMG format (WAV format audio files are converted into ATRAC3 format or changed into OpenMG MP3 format).

Electronic Music Distribution (EMD) Services

EMD allows you to download music files via the Internet. To use OpenMG-enabled services on the Internet, you need:

- ❑ Access to the Internet from your computer. Sign up with an Internet Service Provider and configure your computer for Internet access before using EMD services.
- ❑ Free EMD programs such as EMD key installer. These programs can be downloaded from the Sony EMD Web page.
- ❑ An EMD service provider. Consult the provider for details regarding service.

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

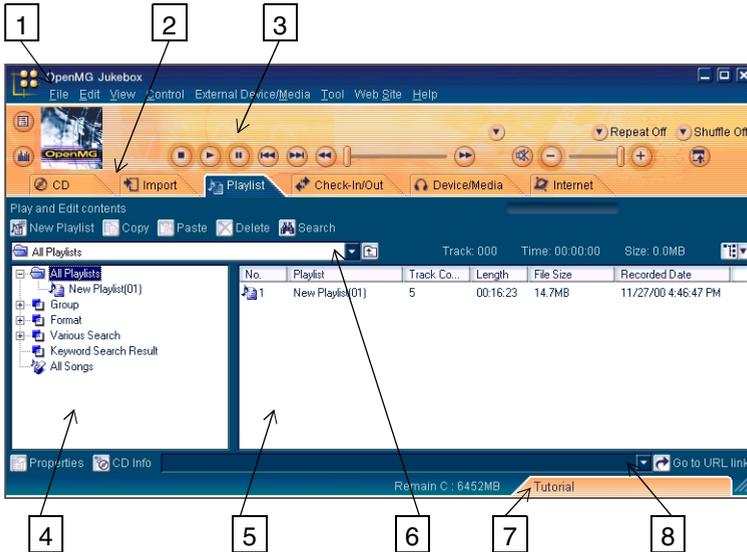
Starting OpenMG Jukebox 2.0

- 1 Click the Start button on the Windows taskbar, select Programs, OpenMG Jukebox, and then OpenMG Jukebox. The CDDDB Registration dialog box appears. For more information regarding CDDDB registration, click the Help button.

 To register with CDDDB, you will need Internet access from your computer.

- 2 After registering with CDDDB, the “Set OpenMG Jukebox as the Application for playing Audio CD” dialog box appears. If you wish to set OpenMG Jukebox as the default application for playing audio CDs, select the appropriate checkbox. Click OK to close the dialog box. The OpenMG Jukebox window appears.

OpenMG Jukebox 2.0 Basic Features



- | | |
|--|--|
| 1 Menu bar Displays OpenMG Jukebox menus. | 5 File List view Lists the items under the selected folder in the File Tree view. |
| 2 Screen Tabs Change the operational sheet view according to function. | 6 Drop-down list Displays the playlists, audio files, etc., of the current screen tab. |
| 3 Player control buttons Control playback (play, stop, pause, etc.). | 7 Tutorial tab Opens and closes the Tutorial screen. |
| 4 File Tree view Displays the folders on your computer. | 8 URL drop-down list Displays URL address information if available. Clicking the “Go to URL link” button connects to the Internet Web page of the URL. |

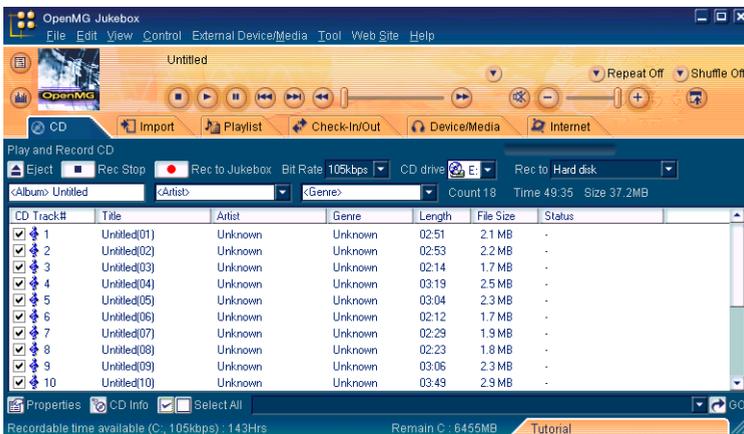
Recording a CD

You can record songs from audio CDs and import them to playlists within OpenMG Jukebox.

 When you record from an audio CD on your CD-ROM drive for the first time, the “CD Drive Optimization” dialog box appears. Click Start to verify your CD-ROM drive. After the verification is performed, recording begins.

- 1 Insert an audio CD into the CD/CD-RW/DVD-ROM drive.
- 2 Click the CD tab.
- 3 Select the Bit Rate, CD drive, and Record to location from the drop-down lists.

CD tab screen



- 4 To select certain tracks from your CD, uncheck any unwanted tracks. You may also click the empty checkbox next to Select All (clears all checkboxes), and then select the desired tracks.

- 5 Click  Rec to Jukebox. Recording begins. When the recording is finished, the new playlist appears in the File Tree view of the Playlist screen tab.

 To name the album and songs, type the name, or retrieve it from the CDDb Web site on the Internet at <http://www.cddb.com/cddb2info/using.html>

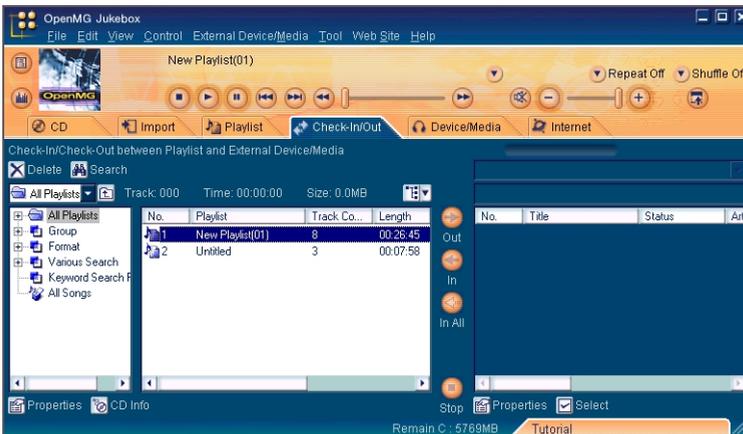
Transferring Songs (Check-in/Check-out)

You can transfer songs between the playlists of your OpenMG Jukebox and external devices/media. For details on using your external devices/media, see the user guide that came with your product. These instructions are for the Check-in/Check-out 1 step mode; for information on 2 step mode, see “Changing the check-in/check-out settings” in the OpenMG Jukebox Help menu.

Check-out

- 1 Connect the external device/media to your computer
- 2 Click the Check-in/Out tab to display the Check-in/Out screen. Your computer recognizes the connected external device/media and lists the information on the right side of the screen.

Check-In/Out tab screen



- 3 Select the Playlist containing the song that you want to check out. The songs in the playlist are listed in the Playlist view in the center of the screen.

- 4 In the Playlist view, select the song to be checked out. To check out more than one song at a time, hold down the Ctrl key and click the songs to be selected.
- 5 Click  (Out), or drag and drop the song to the desired position in the song list of the external device/media. Check-out begins.

 To cancel Check-out, click , or click Cancel in the Processing dialog box displayed during Check-out.

Check-in

 You can only check-in songs recorded on external devices/media to the hard drive of the same computer from which the songs were checked out.

- 1 Connect the external device/media to your computer
- 2 Click the Check-in/Out tab to display the Check-in/Out screen. Your computer recognizes the connected external device/media and lists the information on the right side of the screen.
- 3 Select the song to be checked in from the song list of the external device/media. To check in more than one song at a time, hold down the Ctrl key and click the songs to be selected.
- 4 Click  (In), or drag and drop the song(s) to the Playlist view. If you want to check in all of the songs in the external device/media, click  (In All). Check-in begins.

 To cancel check-in, click , or click Cancel in the Processing dialog box displayed during Check-out.

For more information regarding the use of OpenMG Jukebox 2.0, read the OpenMG Help file. To access the OpenMG Help file, Click the Start button on the Windows taskbar, select Programs, OpenMG Jukebox, and then OpenMG Jukebox Help. Or, from the OpenMG Jukebox Help menu, select OpenMG Jukebox Help.

Additional Features

- ❑ **OpenMG Jukebox Tutorial** — In the Tutorial screen, the available operations of OpenMG Jukebox are briefly described. By clicking items in the screen, you are guided directly to the desired operations of OpenMG Jukebox.
- ❑ **OpenMG Jukebox Backup Tool** — Allows you to back up and restore all the data managed by OpenMG Jukebox, including music, graphics, and information. You must be connected to the Internet to use OpenMG Jukebox Backup Tool.
- ❑ **Import audio files in various formats** — You can import downloaded or stored audio files in various formats, such as MP3, WAV, or WMT (which is compliant with Windows Media Technologies with the extensions .asf or .wma), and manage them on the Playlist of OpenMG Jukebox.
- ❑ **Manage imported songs on the Playlist** — By registering imported songs to the Playlist of OpenMG Jukebox, additional features are made available other than playback. You can create a list of songs categorized by genre or artist, display the created list on a Playlist, and manage these songs in a hierarchical structure by using Playlist folders. You can also edit songs so that multiple songs are created as one (Combine), or divide one song into two (Divide).
- ❑ **Simple mode** — Allows you to perform playback operations only. The operation panel in simple mode is much smaller than in full mode. This is especially useful when you want to play songs with OpenMG Jukebox while using other software, or when you feel that the operation panel in full mode is too large. Additionally, the design of the operation panel in simple mode can be changed by adding a new Skin. Therefore, you can enjoy various panel designs.

Notes on performing the System Restore function of System Tools on Windows® Millennium Edition

If you perform the System Restore function of System Tools on Windows Me, the OpenMG Jukebox version 2.0 database may become corrupted and all music files recorded or imported may not play. Follow the steps below to back up and restore all music files managed by OpenMG Jukebox.

- 1** Before performing the System Restore function, back up your music files by using OpenMG Jukebox Backup Tool. This will help prevent unwanted loss of music files.
- 2** After performing the System Restore function, restore your music files by using OpenMG Backup Tool. This will help to ensure the reliability of playback.

For details on using OpenMG Jukebox Backup Tool, refer to the online help for OpenMG Jukebox.

Notes on using Portable Players

If you have purchased a Portable Player such as NW-MS7 or NW-E3, do not install the version of OpenMG Jukebox that came with the Portable Player. Your computer already has OpenMG Jukebox version 2.0 preinstalled. Overwriting OpenMG Jukebox version 2.0 for VAIO computers may generate malfunctions.

To connect you Portable Player to your VAIO computer, you need a plug-in for OpenMG Jukebox version 2.0. For details, refer to Sony Walkman® Product Support on the Web at <http://www.sony.com/walkmanproductsupport>.

Software Support Information

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

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

America Online® (America Online, Inc.)

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

CompuServe® 2000 (CompuServe)

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| Web site | http://www.compuserve.com |
| phone | 800-848-8990 |

EarthLink Network TotalAccess® (EarthLink, Inc.)

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| 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.)

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| 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)

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

PhotoPrinter™ 2000 Pro (ArcSoft, Inc.)

| | |
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| Web site(s) | http://www.arcsoft.com http://www.photoisland.com |
| phone | 510-440-9901 |
| fax | 510-440-1270 |
| e-mail | techsupport@arcsoft.com |
| hours | M-F, 8:30 AM-5:30 PM PT |

Prodigy Internet® (Prodigy Communications Corporation)

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

Quicken® 2001 (Intuit Inc.)

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| Web site | http://www.intuit.com/support |
| phone | 900-555-4932 (fee-based support) |
| hours | 7 days a week, 24 hours a day |

Windows® Operating System, Internet Explorer (Microsoft Corporation)

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

WinDVD® 2000 (InterVideo, Inc.)

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

* Support from 1-888-4SONYPC 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) or find Sony Customer Service on the Web at <http://www.sony.com/pcsupport>.

Application, System, and Driver Recovery CDs

Your computer comes with the following application and system recovery CDs. (To use your recovery CDs, see “Using Your Recovery CDs” .)

Application Recovery CD(s)

Sony Electronics Inc.

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

Driver Recovery CD(s)

Sony Electronics Inc.

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

System Recovery CD(s)

Sony Electronics Inc.

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.

Using Your Recovery CDs

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

Using the Application Recovery CD(s)

The Application Recovery CD(s) allows you to reinstall individual applications if they become corrupted or are accidentally erased. Reinstalling an individual software title may correct a problem you are experiencing with your computer or software application; you may not need to reinstall the entire contents of your hard drive. If you 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)” .

 You must be in Windows to run the Application Recovery CD. 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 optical 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.

Using the Driver Recovery CD(s)

The Driver Recovery CD utility allows you to reinstall individual drivers and repair software applications if they become corrupted or are accidentally erased. You can reinstall an individual driver to correct a problem that you are experiencing with your computer, hardware, or software application. VAIO Support Agent uses a vault feature on the Driver Recovery CD(s) to repair software applications.

 You must be in Windows to run the Driver Recovery CD utility.

To use the Driver 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 Driver Recovery CD in the optical drive. The Driver Recovery utility loads automatically.
- 3 When the Driver Recovery menu appears, follow the on-screen instructions to complete the recovery process.

Using the System Recovery CD(s)

You can reinstall software titles that shipped with your computer if they are corrupted or 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)” .

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 Full Restore with Format, that is it formats the hard disk drive then restores all the original software.



Full Restore with Format 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 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 optical drive.
- 2 Shut down your computer as described in “Shutting Down Your Computer” .
- 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.

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.

 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 from 30 to 60 minutes to complete.

After recovering your system using the SRCD, you may be prompted to insert your ARCD after restarting Windows. Insert the ARCD to automatically complete recovery of your system.

To repair software applications using VAIO Support Agent

The Driver Recovery CD utility has an information vault that contains the original characteristics for the preinstalled software applications that are protected by VAIO Support Agent.

Troubleshooting



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

Troubleshooting your notebook

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 Power Management tool, scroll function of touchpad, and keyboard shortcut key function combined with the Fn key.

My notebook does not start

- ❑ Check that the notebook is plugged into a power source and that it is turned on. Check that the power indicator on the front panel of the notebook indicates that the power is on.
- ❑ Check that the battery packs are inserted properly and that they are 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 a Power Source” .
- ❑ If you plugged the notebook 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 notebook for at least one hour and then turn on the notebook.
- ❑ Take the battery pack off the notebook, unplug the power cord and plug it again, then turn on the power.

My notebook starts, but my system doesn't start properly

- When the internal backup battery is low on power, it may not start your system properly. The message “Press <F1> to resume, <F2> to setup” appears at the bottom of the screen. Follow these steps:
 - 1 Press F2. The BIOS Setup menu appears.
 - 2 Set the date (month/day/year). Press Enter.
 - 3 Press ↓ to select System Time, then set the time (hour: minute: second). Press Enter.
 - 4 Press → to select Exit, then press ↓ to select Get Default Values. The message “Load default configuration now?” appears.
 - 5 Select Yes and press Enter.
 - 6 Select Exit (Save Changes), and then press Enter. The message “Save Configuration changes and exit now?” appears.
 - 7 Select Yes, and then press Enter. The notebook restarts.

My notebook starts, but the message “Operating system not found” appears and Windows does not start

- Make sure there is no diskette in the floppy disk drive (non-bootable).
- If a non-bootable diskette is in the drive, follow these steps:
 - 1 Turn off the notebook, and then remove the diskette.
 - 2 Restart the notebook and confirm that Windows starts properly.
- If Windows still does not start, follow the steps below to initialize the BIOS:
 - 1 Remove any diskette from the floppy disk drive.
 - 2 Turn off the notebook.
 - 3 Remove any peripheral devices connected to the notebook.
 - 4 Turn the notebook back on.
 - 5 Press the F2 key when the Sony logo appears. The BIOS setup menu screen appears.
 - 6 Press the directional arrow keys to select the Exit menu.

- 7 Press the arrow keys to select “Get Default Values” and then press Enter. The message “Load default configuration now?” appears.
- 8 Select Yes, then press Enter.
- 9 Use the directional arrow keys to select “Exit” (Save Changes), and then press Enter. The message “Save configuration changes and exit now?” appears.
- 10 Select Yes, then press Enter. The notebook restarts.

If your notebook continues to display the message “Operating system not found”, and Windows does not start, contact Sony Customer Support.

My notebook stops responding or does not shut down

It is best to shut down your notebook using the Shut Down command on the Windows Start menu. Using other methods, including those listed here, may result in loss of unsaved data.

- ❑ Try restarting the notebook. On the Windows taskbar, click the Start button, click Shut Down, and then click Restart.
- ❑ If you cannot restart as described in the preceding step, you can restart the notebook by pressing Ctrl+Alt+Delete (at the same time) twice.
- ❑ If the previous step does not work, press and hold the power button for at least four seconds. This turns off the power.
- ❑ If your notebook stops responding while playing a CD or DVD, stop the CD/DVD, and restart the notebook by pressing Ctrl+Alt+Delete (at the same time) twice.
- ❑ Unplug the notebook from the AC adapter and remove the battery pack from your notebook.

 Pressing Ctrl+Alt+Delete (at the same time) or turning off the notebook with the power switch may result in data loss in files that are currently open.

My notebook does not enter the power saving mode I selected.

- ❑ Click Start, point to Program, point to Accessories, point to System Tools, and then click System Information.
The Help and Support window appears.
- ❑ Click System Configuration Utility under the Tools menu.
- ❑ Click the Advanced button on the General tab, and Confirm the following information:
 - 1 The message “Standby function is enabled” is displayed. If the message reads “Standby function is disabled”, click the Enable button.
 - 2 The message “Hibernate feature is enabled” is displayed. If the message reads “Hibernate feature is disabled”, click the Enable button.
 - 3 Click OK and restart your notebook.

The Power Management setting is not responding

Your notebook is unstable. To restore your notebook to its normal operating stability:

- ❑ Close all open applications.
- ❑ Push and hold the power button for four seconds or longer to shut down the notebook.

Troubleshooting the LCD screen

My LCD screen is blank

- ❑ Check that the notebook is plugged into a power source and that it is turned on.
- ❑ Check that the power indicator on the notebook is on.
- ❑ Check that the battery pack(s) is inserted properly and that they are charged.
- ❑ The notebook may be in LCD (Video) Standby mode. Press any key to activate the screen.
- ❑ The display mode may be set to external display mode. Press and hold the Fn key while pressing F7 several times.

My LCD screen continues to show the previous screen.

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

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

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

I want to change the video resolution of my display

You can use independent controls to change the video resolution of your display.

- Click Start, point to Settings, point to Control Panel, and then click the Display icon.
The Display Properties dialog box appears.
- Click on the Settings tab.
- Move the Screen Area slider to change your video resolution.

Troubleshooting the mouse and touchpad***My mouse does not work***

- If you are using an optional Sony USB mouse PCGA-UMS1 series, check that the mouse is plugged into the USB connector.

My touchpad does not work properly

- You must restart the notebook to make the touchpad work again.
- If your touchpad is interpreting a single tap as a double-click, you must adjust the button assignments. Follow these steps:
 - 1 Click Start, point to Control Panel, and then click on the Mouse icon.
 - 2 Change the button assignments in the Mouse Properties dialog box. (One of the buttons is assigned to the double-click action.)

The pointer does not move (while using the Touchpad or Mouse)

- ❑ Click the Start button on the Windows taskbar, and select Shut Down to display the Shut Down Windows dialog box, then press Enter.
- ❑ If you cannot turn off your notebook as described in the step above, press Ctrl+Alt+Delete (at the same time) to restart the notebook.
- ❑ If you cannot restart your notebook as described in the step above, press and hold the power button for more than four seconds to turn off the notebook.
- ❑ If the pointer does not move while playing a disc, press Ctrl+Alt+Delete to stop playback and restart the notebook.

Troubleshooting drives, PC cards and peripheral devices

My floppy disk drive can not 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 optical drive is not playing my CD or DVD properly

- ❑ Make sure the label of the disc is facing up.
- ❑ If the disc requires software, make sure the software is installed according to the manufacturer's instructions.
- ❑ A dirty or damaged disc may cause the notebook to stop responding while it tries to read the disc. If necessary, restart the notebook, remove the disc, and then check it for dirt or damage.
- ❑ If you see video but can not hear audio, check all of the following:
 - ❑ Check that your optical drive does not have the mute setting enabled.
 - ❑ Check the volume setting in the audio mixer.
 - ❑ If you are using external speakers, check the volume settings, and then check the connections between your external speakers and the notebook.
 - ❑ Click Start, select Control Panel, System, and then Device Manager. Check that the correct drivers are installed properly.
- ❑ Do not use adhesive labels to identify the CD. The label may come off while the disc is in use in the optical drive and cause the drive to malfunction.

- ❑ If a region code warning appears when you try to use your optical drive, it may be that the DVD you are trying to play is incompatible with the optical drive. Check the region code listing on the DVD packaging.
- ❑ Moisture condensation may have occurred. Leave the notebook idle for at least 1 hour with the notebook turned on.

My optical drive tray does not open

- ❑ Make sure the notebook is turned on.
- ❑ Press the Eject button on the optical drive.
- ❑ If the Eject button does not work, open the tray by inserting a sharp, pointed object in the hole to the right of the Eject button.

I cannot use digital video (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 your notebook and all connected devices. Disconnect the devices that are not in use. Check the connections for each device, then restart your notebook.

My PC card is not working

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

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

Troubleshooting software

My software program stops responding or crashes

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

When I click an application icon, the message “You must insert the application CD into your optical drive” appears and the software does not start

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

I hear background “noise” while using Windows Media Player to play my music CDs

Sony suggests using the preinstalled Media Bar or OpenMG Jukebox software to play audio CDs.

Troubleshooting the modem

My modem does not work

- ❑ Check that the phone line is plugged into the line jack. See “Connecting a Phone Line” 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’s modem. (All preinstalled Sony programs are compatible.)
- ❑ Reinstall the modem driver. For details, see “Using the Driver Recovery CD(s)” .

My modem connection is slow

Your notebook is equipped with a 56K/V.90 compatible modem. Many factors may influence modem connection speed, including telephone line noise or compatibility with telephone equipment (such as fax machines or other modems). If you think your modem is not connecting properly to other PC-based modems, fax machines, or your Internet Service Provider, 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, check that the ISP is not experiencing technical problems.
- ❑ If you have a second phone line available, try connecting the modem to that line.

Troubleshooting audio

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 the volume.
- ❑ If your notebook is powered by batteries, check that the battery packs are inserted properly and that they are 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®.
- ❑ 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.
- ❑ Reinstall the sound driver. For details, see “Using the Driver Recovery CD(s)” .

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” for details.

Troubleshooting the printer

I cannot print

- ❑ Your connected printer may not function after the notebook resumes from a power saving mode. If this occurs, follow these steps to reset the printer connection:
 - ❑ Right-click My Computer icon on the desktop, then select Properties.
 - ❑ Click the Device Manager tab.
 - ❑ Select Refresh, then click OK. The printer should function properly.
- ❑ Verify that the parallel port is set to the proper mode.
 - 1 Restart your computer, and then press the F2 key when the Sony logo screen appears. The BIOS setup menu appears.
 - 2 Press the Esc key.
 - 3 Select LOAD BIOS DEFAULTS, and then press Enter.
 - 4 Select EXIT SAVING CHANGES, and then press Enter.
 - 5 Press Enter again. The BIOS defaults are reset and the parallel port configuration is set to default values.

Getting Help

Sony provides several support options for your VAIOR[®] notebook computer. When you have questions about your computer and the preinstalled software, check these sources for answers, in the following sequence:

1 ***VAIOR[®] Notebook User Guide***

This User Guide contains information on product specifications and on how to get the most from your computer, find help, customize your notebook, and solve common problems.

2 ***Manuals and online help files that may accompany your preinstalled software***

Most of the manuals for preinstalled software are located on your hard disk drive as online help files. You can access the online help files from the Help menu in the specific application. A printed manual is available for some applications.

3 ***VAIOR Support Agent***

VAIOR Support Agent can be accessed from the Windows desktop. Using advanced diagnostic technology, Sony's VAIOR Support Agent runs scheduled protections of your applications, network settings, and other important software settings. When your software is protected, you can use VAIOR Support Agent to repair software problems by restoring your software to any of the previously protected states.

4 ***Sony PC Support***

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

5 ***Sony Fax-on-Demand***

This service, which requires a fax machine or your fax software, provides answers to commonly asked questions. You can use this automated service to request a list of available topics then select the topics that you want to receive. To contact the Sony fax-on-demand service, call:

1-888-4SONYPC (1-888-476-6972)

6 ***Sony Customer Support***

Software support is available free of charge for 90 days after the original date of purchase. You can call and speak with a Sony Customer Support Representative without using your computer by calling:

1-888-4SONYPC (1-888-476-6972)

Specifications

The following table details the hardware specifications for your computer.

| Model | PCG-FX210/PCG-FX215 |
|--|--|
| Processor | 800 MHz* Mobile AMD Duron™ processor |
| L1 Cache Memory L2 Cache Memory | 128 KB 64 KB (on die) |
| Hard Disk Drive | 10 GB† |
| Standard RAM | 128 MB SO-DIMM in slot Expandable to 256 MB |
| LCD Screen | 14.1" XGA TFT (PCG-FX210) 15.0" XGA TFT (PCG-FX215) |
| MPEG | Available |
| Graphics | ATI RAGE™ Mobility-M1 with 3D acceleration support. |
| Sound Capabilities | Windows® sound system compatible, 3D surround Analog devices AD1881A |
| Diskette Drive | Removable 3.5" 1.44 MB |
| Optical drive (DVD-ROM drive) | Reads data up to 24x max. CD-ROM reading speed. Reads data up to 8x max. DVD-ROM reading speed.‡ |
| Laser Diode Properties | Wave Length: 780nm and 650nm Laser Output: 30.2 µW |
| Modem | V.90/K56flex data/fax compatible modem** |
| Drive Bay | <ul style="list-style-type: none"> • Supports floppy disk drive (included) • Supports second rechargeable battery (optional) |
| Expansion Capabilities | Type I/II PC cards and Type III PC card with CardBus support |

| Model | PCG-FX210/PCG-FX215 |
|-------------------------|---|
| Connection Capabilities | <ul style="list-style-type: none"> • 2 USB ports • i.LINK^{††} • Serial port • VGA monitor • Parallel (printer) • Phone line (RJ-11) • Microphone • Headphone • NTSC video out • Ethernet |
| Supplied Accessories | <ul style="list-style-type: none"> • Floppy disk drive • Rechargeable battery • AC adapter and power cord • Weight saver • Video cable |
| Power Source | 19.5V DC/AC 100-240V |
| Power Management | <ul style="list-style-type: none"> • Energy Star compliant • Advanced Configuration and Power Interface (ACPI) |
| Battery | <ul style="list-style-type: none"> • Lithium-ion • Supports dual battery operation |
| Dimensions | PCG-FX210: 12.8"(w) x 1.5"(h) ^{††} x 10.5" (d) (324 x 35.8 x 265.5mm) PCG-FX215: 12.8"(w) x 1.6"(h) x 10.5" (d) (324 x 38.5 x 265.5mm) |
| Weight | <ul style="list-style-type: none"> • PCG-FX210: 6.3 lbs (2.9 kg), PCG-FX215: 6.7 lbs (3.1 kg) (with battery and weight saver) • PCG-FX210: 6.7 lbs (3.1 kg), PCG-FX215: 7.1 lbs (3.3 kg) (with battery and floppy disk drive) |
| Operating Temperature | 40° F to 95° F (+5° C to 35° C) temperature gradient less than 50° F (10° C) per hour |
| Operating Humidity | 20% to 80% (not condensed), provided that humidity is less than 65% at 95° F (35° C), hygrometer reading of less than 84° F (29° C) |
| Storage Temperature | 4° F to 140° F (-20° C to 60° C), temperature gradient less than 18° F (-10° C) per hour |
| Storage Humidity | 10% to 90% (not condensed) provided that humidity is less than 20% at 140° F (60° C), hygrometer reading of less than 95° F (35° 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.

- ‡ If a region code warning appears when you are using the DVD player, it could be that the DVD you are trying to play is incompatible with the optical drive in your VAIO notebook. Region code indicators such as a “1” or “ALL” are labeled on some DVDs to indicate what type of player can play the discs. Unless a “1” or “ALL” is identified on your DVDs or on the packaging, you cannot play the disc on this player.
- ** Maximum speed for faxing is 14.4 kbps. Your 56K/V.90 compatible modem is capable of downloading at 53 kbps. Your online service or Internet Service Provider, however, may not support this technology or operate at this speed.
- †† i.LINK is a Sony trademark used 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. The thinnest height for PCG-FX210 is 1.9" (46.9 mm), PCG-FX215 is 2.2" (54.1 mm).

NOTE: Specifications are subject to change without notice.

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