

**SONY®**

***VAIO Slimtop™ LCD  
Computer User Guide***

**PCV-L640**



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## **Owner's Record**

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

Model Number: PCV-L640

Serial Number: \_\_\_\_\_

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## **Safety Information and Caution**

### **CDRW Laser diode properties**

<b>Laser output</b>	1.8mW(Read) 21mW (Write)
<b>Wave Length</b>	773–797nm 780–795nm (UJDA320)

- ❑ To prevent fire or shock hazard, do not expose your desktop 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.
- ❑ The socket outlet shall be installed near the equipment and shall be 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 drive cabinet. Refer servicing to qualified personnel only.**

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

**! For CD-RW: Danger - Invisible laser radiation when open. Avoid direct exposure to beam.**

**! Caution: For ADSL modem models, to reduce the risk of fire, use only No. 26 AWG or larger telecommunication line cord.**

**! 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.**

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

**! Pour les CD-RW : Danger : Radiation laser visible et invisible si ouvert. Évitez l'exposition directe au faisceau.**

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

- 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.

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

Sony Customer Support can be reached at [www.sony.com.pcsupport](http://www.sony.com.pcsupport)

- 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.

## Regulatory Information

### Declaration of Conformity

Trade Name: SONY  
Model No.: PCV-L640  
Responsible Party: Sony Electronics Inc.  
Address: 1 Sony Drive  
Park Ridge, NJ 07656  
Telephone: 201-930-6972

This phone number is 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, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

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

interference by one or more of the following measures:

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

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

Only peripherals (computer input/output devices, terminals, printers, etc.) that comply with FCC Class B limits may be attached to this computer product. Operation with noncompliant 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. The FCC Ringer Equivalence Number (REN) for this equipment is 0.7. 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 modem, for repair or warranty information, please contact 1-888-4SONY-PC, or write to the Sony Customer Information Center, 12451 Gateway Blvd., Fort Myers, FL 33913. If the trouble is causing harm to the telephone network, the telephone company may request that you remove the equipment from the network until the problem is resolved.

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

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

commission, public service commission, or corporation commission for information.)

### ***Telephone Consumer Protection Act of 1991 (United States)***

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

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

### ***Telephone Consumer Guidelines (Canada)***

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

CRTC  
Terrasses de la 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.

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## **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 electrical 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 0.7.

## **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 0.7.

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# Welcome

Thank you for purchasing your Sony VAIO® computer! Your new computer is a superb blend of high technology and easy-to-use functionality. This *User Guide* contains information about the applications included with your system, contact information for software vendors, and the specifications for your computer.

## ***Choosing an Ergonomic Location***

Before you get started, find the best location for your new computer. Here are some things to consider when planning your workspace:

- ❑ **Stable work surface** — Use a stable work surface large enough to support the computer and other equipment.
- ❑ **Ventilation** — Leave at least eight inches of space on the left and back sides of your computer to enable proper ventilation.
- ❑ **Placement of the keyboard, mouse, and other input devices** — Place your keyboard, mouse, and other input devices so that your arms and hands are in a relaxed, comfortable position. The keyboard should be directly in front of you. Adjust the level of the keyboard so that your lower arms are parallel to the floor. Keep your wrists in a relaxed position when you are using the keyboard—not angled up or down. Use the palmrest only briefly, for resting. While typing, never use the palmrest or rest your hands on the table. Position the mouse at the same level as the keyboard. Hold the mouse with a relaxed hand, and use your whole arm to move it. Take breaks during sessions with your computer. Excessive use of the mouse or a joystick 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—avoid slouching forward or leaning far backward.
- ❑ **Viewing angle of the display** — Position the display 18 to 26 inches directly in front of you, with the top of the screen at or a little below eye level. Use the display's tilting feature to find the best position. You can reduce eye strain and muscle fatigue by placing the display in the proper position.

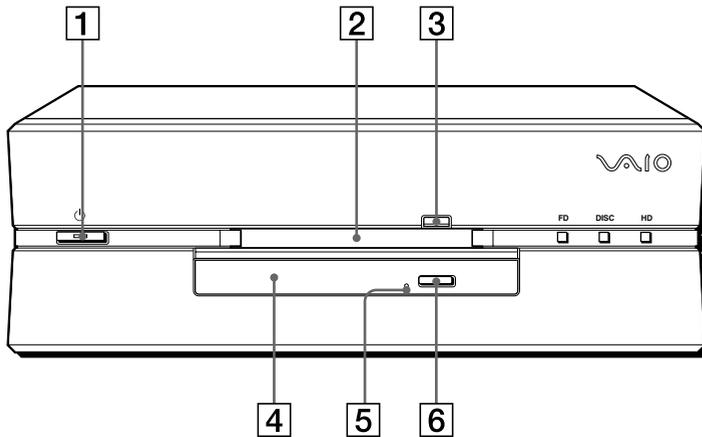
- ❑ **Lighting** — Choose a location where windows and lights do not create glare and reflection on the display. Use indirect lighting to avoid bright spots on the display. You can also purchase accessories for your display that help reduce glare. Proper lighting adds to your comfort and work effectiveness.

## Front Panel Overview

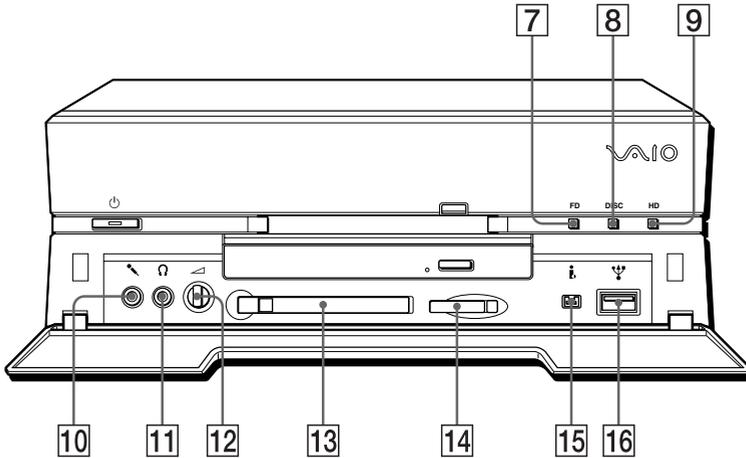
The front panel of your VAIO Slimtop Computer allows for access to the diskette and CD-RW drive. It also includes USB and i.LINK® ports to connect USB devices, digital equipment, or other components.

### Locating Controls and Connectors

#### Slimtop Front Panel



- 
- 1**    **Power switch and indicator light**  
Turns on/off the computer and the display.  
The indicator light is green while the power is on and amber when the computer is in standby mode.
- 
- 2**    **Floppy disk drive**  
Reads/writes data from/to a 3.5-inch floppy disk.
- 
- 3**    **Floppy disk eject button**  
Ejects the floppy disk.
- 
- 4**    **CD-RW drive**  
Reads data from a CD-RW/CD-R/CD-ROM.
- 
- 5**    **Manual eject hole**  
If the CD does not come out when you press the CD-RW eject button, insert a thin, pointed object into this hole to eject the disc manually.
- 
- 6**    **CD-RW eject button**  
Ejects a CD.
-

**Slimtop Front Panel (cont't)**

- 
- 7** ***FD (Floppy disk drive) access indicator light***  
Lights in green while reading/writing data from/to a floppy disk.
- 
- 8** ***Disc (CD-RW drive) access indicator light***  
Lights in amber while reading data from a CD-RW/CD-R/CD-ROM.
- 
- 9** ***HD (drive) access indicator light***  
Lights in green while reading/writing data from/to the hard disk.
- 
- 10** ***MIC (Microphone) connector\****  
Connects a microphone (not supplied).
- 
- 11** ***PHONES (Headphones) connector\****  
Connects headphones (not supplied).
- 
- 12** ***VOLUME control***  
Adjusts the volume of the headphones connected to the PHONES connector. Users should note that this does not control the volume of the integrated LCD speakers.
- 
- 13** ***PC CARD slot***  
A PC Card (also called a PCMCIA card) can be installed in this slot. PC cards enable you to add functionality to your system.
-

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**14**  **MEMORY STICK media slot**  
Insert a Sony **Memory Stick**® card into this slot.

---

**15** **i.LINK (4-pin)**  
Connects a digital device such as a Sony Digital Handycam® Camcorder.

---

**16**  **USB (Universal Serial Bus) connector**  
Connects a USB device.

---

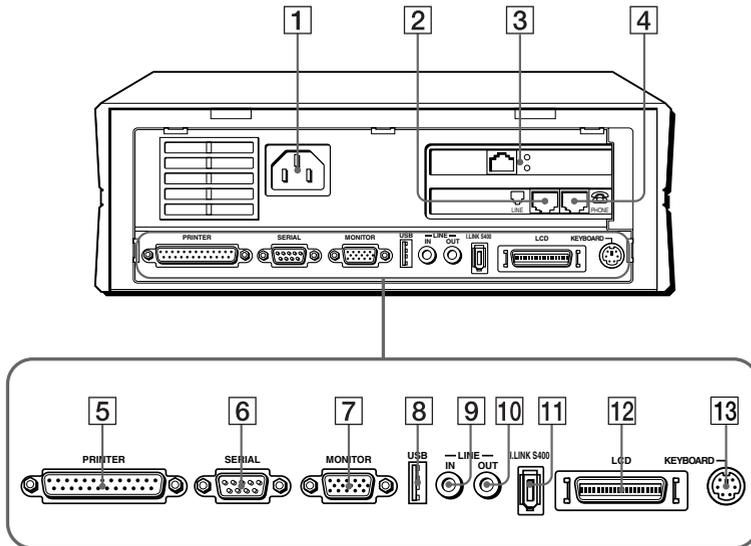
\* See “Using a Headphone or Microphone” for important information about connecting a microphone and headphone.

## Back Panel Overview

The back panel of your computer contains the connectors where you plug in supplied and optional accessories. The icons on the back panel serve as a map to help you locate the connectors on your computer.

## Locating Controls and Connectors

### Slimtop Rear Panel



---

**1** **AC INPUT connector**  
Connects the supplied power cord.

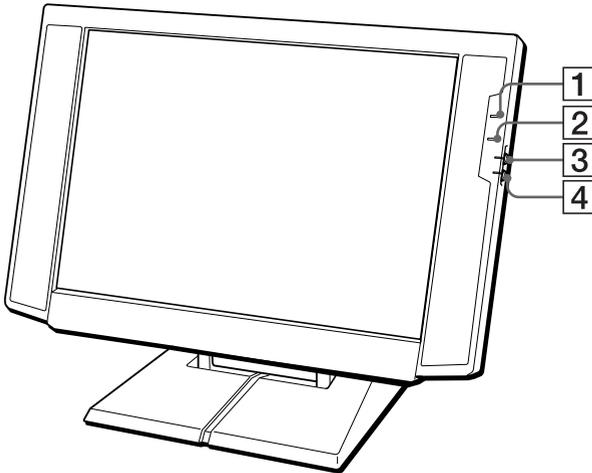
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- 
- |           |  |
|-----------|--|
| <b>2</b>  | <b><i>LINE jack</i></b><br>Connects a phone cable to the wall jack.  |
| <b>3</b>  | <b><i>ETHERNET connector</i></b><br>10Base-T/100Base-TX Fast Ethernet interface.<br><b>! The connector marked with (Network) is for LAN.</b>   |
| <b>4</b>  | <b><i>TELEPHONE jack</i></b><br>Connects the phone to the computer.  |
| <b>5</b>  | <b><i>PRINTER connector</i></b><br>Connects a parallel device, such as a printer or scanner.   |
| <b>6</b>  | <b><i>SERIAL connector</i></b><br>Connects a serial device, such as a digital still camera.  |
| <b>7</b>  | <b><i>MONITOR connector</i></b><br>Connects a standard CRT display.  |
| <b>8</b>  | <b><i>USB (Universal Serial Bus) connector</i></b><br>Connects a USB device.   |
| <b>9</b>  | <b><i>LINE IN connector</i></b><br>Connects an audio device.   |
| <b>10</b> | <b><i>LINE OUT connector</i></b><br>Connects an audio device or an active speaker.   |
| <b>11</b> | <b><i>i.LINK (6-pin)</i></b><br>Connects a digital device such as a Sony Digital Handycam <sup>®</sup> Camcorder.  |
| <b>12</b> | <b><i>LCD MONITOR connector</i></b><br>Connects the LCD that comes with the VAIO Slimtop LCD computer.<br>Note: Do not connect any display to this connector other than the LCD that is supplied with this system. |
| <b>13</b> | <b><i>KEYBOARD connector</i></b><br>Connects a keyboard.   |
-

## LCD Overview

Your VAIO Slimtop Computer comes with an LCD monitor, saving valuable desktop space.

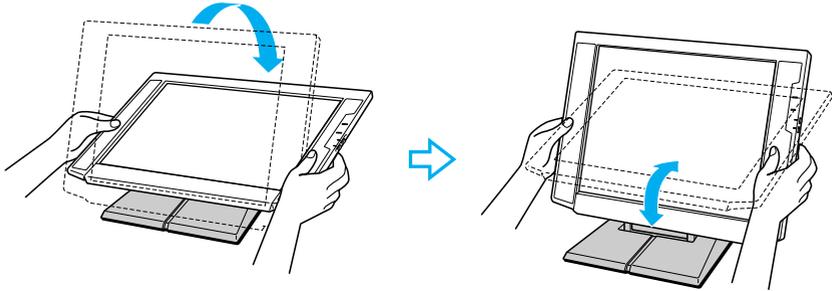
### LCD



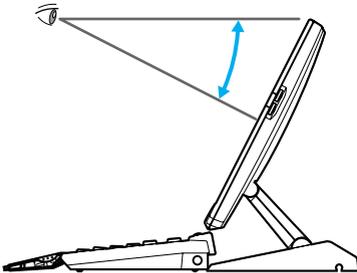
- 
- 1**     **Power indicator light**  
Light is green while the power is on. When the computer enters the standby mode, this indicator light turns amber.
- 
- 2**     **Information LED**  
Light turns red to alert the user to activities, such as the arrival of e-mail. See “AutoAlert E-mail Notification System.”
- 
- 3**     **Brightness control**  
Adjusts the brightness of the screen.
- 
- 4**     **Volume control**  
Adjusts the volume of the integrated speakers on the LCD display.
-

**To adjust the height and viewing angle of the display**

- 1 Holding both sides of the display, push the display panel out and up.



- 2 Set the display height so that it does not touch the keyboard, and adjust the viewing angle approximately 27 degrees from eye level to the center of the screen.



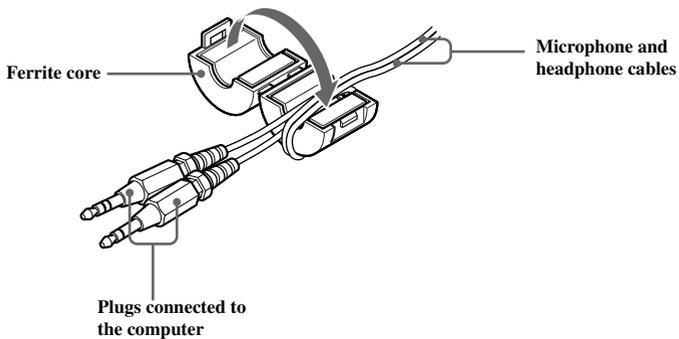
 The LCD display is designed to maintain the best ergonomic viewing angle.

## Using a Headphone or Microphone

When you connect a microphone or headphone to your computer, attaching a ferrite core will reduce electrical interference.

- 1 Attach the (supplied) ferrite core at the end of the headphone or microphone cable closest to the computer.
- 2 Wrap the cable through the center of the ferrite core.

 The following illustration shows how to attach the ferrite core when you are using both a headphone and a microphone.



 The LCD and keyboard cables already include a ferrite core. Do not remove the ferrite core from these cables.

# VAIO Action Setup

VAIO Action Setup manages the settings for your computer's Programmable Power Keys (PPK), **Memory Stick<sup>®</sup> media**, i.LINK interface, and internal timer. An overview of each of these functions is provided below. For more information on changing the settings using VAIO Action Setup, see the online VAIO Action Setup help files. To access the help files, from the Start menu, point to Programs/VAIO Action Setup/VAIO Action Setup Help.

## ***Pre-setting i.LINK devices***

You can pre-set your i.LINK-equipped devices to launch desired functions, such as automatically starting DVgate applications or connecting two VAIO computers.

### ***To pre-set your i.LINK device to launch a desired function:***

- 1** From the Start menu, select Programs > VAIO Action Setup > VAIO Action Setup.
- 2** Click i.LINK.
- 3** Click the Advanced Setting tab.
- 4** Click the Enable i.LINK launcher function checkbox and click Apply.
- 5** Connect the device to your computer with your i.LINK cable.
- 6** Turn on the device.  
The VAIO Action Setup dialog box appears.
- 7** Click OK.
- 8** To modify the device name, click the current device name in the list box and click Modify device name.
- 9** Type the desired name and click Apply.
- 10** To assign an application, click Modify.  
The Select Application dialog box appears.
- 11** Select the desired application and click Next.

- 12 Click Next to confirm the application name.

The Input Application Name dialog box appears. You may change the name and description of the application you want to launch.

- 13 Click Finish to complete this step.

The next time the device is connected and turned on, the assigned application will launch automatically.

## ***Changing the Window Design of Sony Software***

*To change the window design of Sony software:*

- 1 Click the Start button, point to Settings, and then click Control Panel.
- 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.

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

## ***Programmable Power Keys***

Your Sony computer comes with technology that allows you to get to your favorite applications easily. Each Programmable Power Key (PPK) on your VAIO Smart convertible keyboard comes programmed to launch a preset application with a single press of the key. If you wish, you can use the VAIO Action Setup software to change the Programmable Power Keys' preset functions.

The Programmable Power Keys are located at the top of your keyboard, and are numbered P1 through P6. The keys work even when the computer is turned off. Pressing one of these keys turns on the computer and launches the preset application.

The six Programmable Power Keys perform by default the functions listed in the table below.

<b>Key</b>	<b>Function</b>
P1 (INTERNET)	Starts Microsoft® Internet Explorer for Windows® 98.
P2 (MAIL)	Starts Microsoft® Outlook® Express.
P3 (WORK)	Starts Microsoft® Word.
P4 (FINANCE)	Starts Intuit® Quicken® Basic 2000.
P5 (SETUP)	Starts PPK Setup.
P6 (HELP)	Launches demo.

## **Internal Timer**

The VAIO Action Setup software allows you to set your computer's internal timer to launch certain applications automatically. The timer can start applications even when the power is off.

 Some software applications take longer than others to launch. It is advisable to confirm in advance the amount of time your selected application takes to start.

## **AutoAlert E-mail Notification System**

VAIO Action Setup also enables you to set up your computer to notify you with an  Information LED when new mail arrives in your e-mail mailbox. The Information LED turns red to indicate that new e-mail has arrived. For this AutoAlert E-mail Notification System to work, you must use Microsoft® Outlook® Express as your default e-mail software, and you must have an Internet Service Provider with dial-up capabilities set up.

As an alternative, you can program your AutoAlert E-mail Notification System to set the Information LED to turn on when it has successfully completed the task of dialing up and connecting to receive mail. In this case, the Information LED turns on to indicate that your e-mail account has been accessed successfully, regardless of whether or not you have mail; this works with Microsoft Outlook Express.

 The e-mail software you choose to use with PPK must be set as your default e-mail software.

See "LCD Overview" for an illustration showing the Information LED's location.

## ***AutoAlert E-mail Notification System Software Restrictions***

### ***If you use software that uses a phone line:***

- ❑ The computer may not be able to disconnect the phone line due to communication and server conditions.
- ❑ Be sure to monitor the status of the software when running the AutoAlert E-mail Notification System, and manually disconnect the phone line if you notice a malfunction. Furthermore, when using the timer to start the software, set the computer to shut down or enter system standby mode after a certain length of time. This allows the computer to disconnect the phone line if the computer fails to disconnect the line normally.

### ***If you are using the timer to download e-mail automatically:***

- ❑ Set up your e-mail software to redial automatically if it does not connect the first time.
- ❑ Set the e-mail software to disconnect the phone line automatically when all mail has been downloaded.

### ***If you are using Microsoft® Outlook® Express:***

When using the AutoAlert E-mail Notification System with Microsoft Outlook Express, select the “Dial automatically” setting in your Microsoft Outlook Express software. To adjust this setting:

- 8 Start Outlook Express.
- 9 Click Tools and then select Options.
- 10 Select the check box “Automatically dial when checking for new messages.”
- 11 Click OK.

## ***Using the Wheel Mouse***

### ***For information on the Wheel Mouse, see MouseWare Help:***

- 1 From the Start menu, select Programs > MouseWare.
- 2 Click MouseWare Help.

The MouseWare Help program will launch.

**To set up the mouse for left-handed use:**

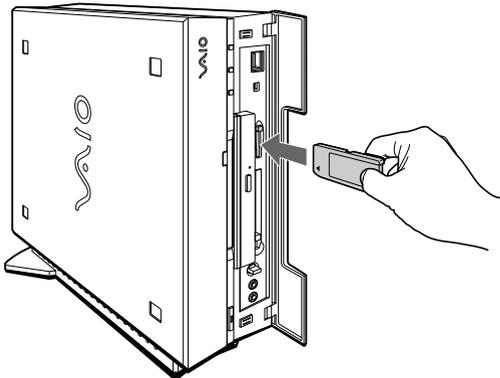
- 1 Click My Computer on your desktop.
- 2 Click Control Panel, and then Click Mouse.  
The Mouse Properties dialog box appears.
- 3 In the Quick Setup tab, click Device Setup.
- 4 In the Device Setup Wizard dialog box, click Next.
- 5 Select the radio button next to “Left side of the keyboard.”
- 6 Click Next three times, and then click Finish.
- 7 Click Apply.

## **Using the Memory Stick Media and VisualFlow**

You can use VAIO Action Setup to preset your computer to automatically launch an application when you insert a Memory Stick.

Your Sony computer is designed to support the new Memory Stick recording media. The Memory Stick media is a small, versatile device that allows you to share data between various types of Sony equipment.

### **Inserting the Memory Stick Media**

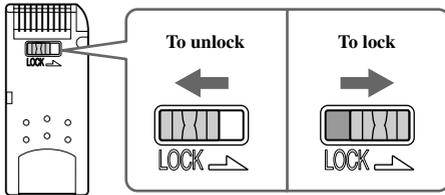


 When you use the card, your computer automatically launches Windows Explorer. This allows you to view the contents of the card.

***To protect data on Memory Stick media from accidental changes:***

Memory Stick media contains a write-protect tab. The write-protect tab prevents accidental changes to information recorded on the Memory Stick media. When you slide the write-protect tab to the LOCK position, the Memory Stick is write-protected, which means you cannot delete, copy, or save information on the Memory Stick. When you slide the tab to the un-LOCK position, you can write to or modify the Memory Stick contents.

***Locking the Memory Stick***



***To change the way the computer responds when a Memory Stick is inserted into the Memory Stick media slot :***

Change the options on the Memory Stick tab in the PPK Setup software.

## **VisualFlow**

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

### **To use VisualFlow:**

- 1 From the Start menu, select Programs > VisualFlow > VisualFlow.

 If VAIO Action Setup has been configured to launch VisualFlow by default upon insertion of a Memory Stick, VisualFlow starts automatically when a Memory Stick is put into the S:\ drive.

- 2 Click on an icon in the View section on the main toolbar to select a display layout.
- 3 Click on an icon in the Sort section on the main toolbar to select a sorting method.
- 4 Resting your cursor on the left end of the main toolbar activates the current Memory Stick properties.
- 5 Resting your cursor on the right end of the main toolbar activates a secondary toolbar with more functions.
- 6 Click an image to show a normal view centered on the screen.
  - Click an image to show an enlarged view.
- 7 Movie files start playback when the view is enlarged. Click again on movie files to restore the view to normal.

 While an image is enlarged, the Launch toolbar appears on the bottom of the window. Any associated application can be activated from here.

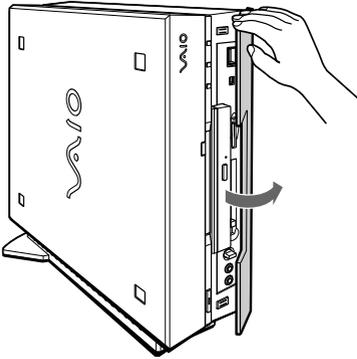
## Using PC Cards

This computer has a card bus PC card slot that supports a Type I or II PC card.

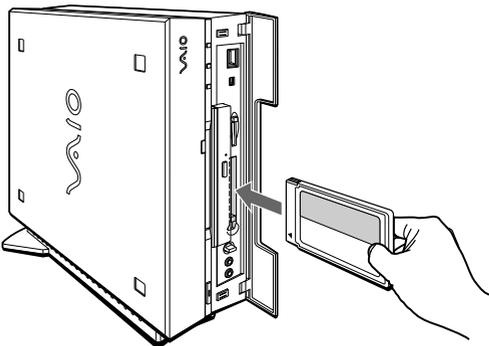
### To insert a PC card:

 You do not need to shut down your computer when inserting a PC card.

- 1 Open the front panel.



- 2 Insert the PC card into the PC card slot until it clicks into position.



 When the card is completely inserted, the eject button pops out. If you cannot insert the card, do not forcibly insert it. In this case, make sure the card is not inserted upside-down or backward, and then reinsert the card into the slot carefully.

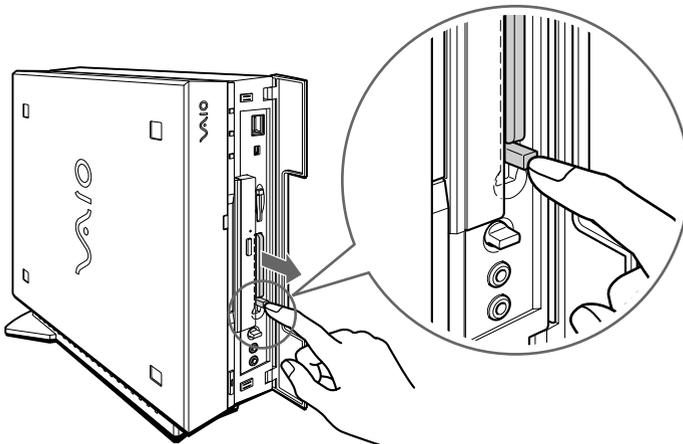
See the manual that came with the PC card for details on using it.

To close the front panel when the eject button is protruding, fold the button down onto the computer.

### ***To eject a PC card:***

 If you eject the PC card incorrectly, the system may not work correctly.

- 1 From the Start menu, select Settings > Control Panel.
- 2 Click the PC Card icon.
- 3 Click the name of the card that you want to eject, and then click Stop.
- 4 When the message “You may safely remove this device” appears, click OK.
- 5 Push the PC card eject button on the front panel of the system unit. You may need to pull out the eject button before you can eject the card.



The card is ejected from the card connector. Remove the card by holding it by its edge and pulling it out carefully.

# Sony Digital Media Park Applications

Your VAIO® computer comes with a collection of applications that make it easy to use advanced multimedia formats. This section highlights the Media Park applications and the digital video capabilities.

## **Media Bar™**

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. Media Bar software encompasses audio/video library cataloging and playlist management, in addition to digital video quality control and effects features. Media Bar seamlessly integrates a variety of new media formats with an easy-to-use software interface.

## **DVgate™**

DVgate makes it easy to edit digital videos. You can capture, edit, and grab digital video clips and then assemble them into a polished home video everyone will enjoy. You can also use DVgate to capture individual frames from digital video clips, and then save them as graphic files. Enhance your Web page, send family and friends your favorite stills, create your own wallpaper. The possibilities are endless.

## **PictureGear™**

PictureGear 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, and even HTML photo albums.

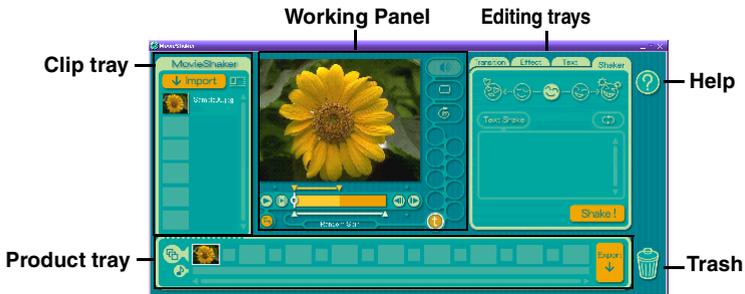
## **Smart Capture**

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, or other cameras that support the i.LINK interface. Smart Capture allows you to capture and compress video or still images that you can save or share via e-mail. Captures are low resolution, making it ideal for e-mail. For high-quality captures, use DVgate.

## Movie Shaker

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

### Create a Movie using Shaker

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

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



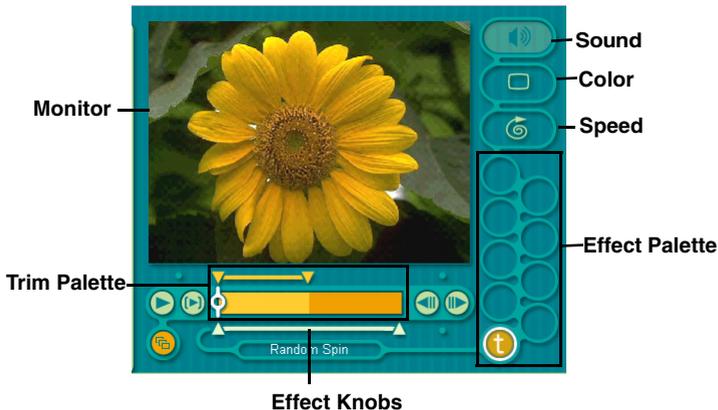
- 3 Click **Shake !**. A thirty second scene is automatically generated and saved to the Product tray.
- 4 To preview, switch the Work Panel to Product tray mode and press play.

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

## Editing Clips and Scenes

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

### Working Panel



Adding effects to a scene or a clip:

- 1 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.

## **Using Digital Video**

### **Connecting a Digital Video Recorder**

Before connecting a digital video camera recorder to your computer, turn off the power on the camera. After connecting the camera, turn the power back on. You do not need to turn off the computer when connecting a camera.

### **Using DVgate**

#### ***When capturing clips:***

- ❑ Do not use DVgate when the connected digital video peripheral is in Timer Recording mode, as this could produce a malfunction in the peripheral.
- ❑ Captures larger than 2 GB (9 minutes and 30 seconds) are automatically continued in a second file.
- ❑ You can record stereo audio (stereo 1) while capturing video. You cannot add audio on the stereo 2 track after capturing the video data.
- ❑ You cannot use different audio modes on the same tape. You should perform a separate capture for each audio mode you wish to use.
- ❑ DVgate does not support hard disk compression. You should not use disk compression if you are planning to work with DVgate.
- ❑ Title data is saved in the flash memory of a digital video camera and is not transferred to tape by DVgate.
- ❑ To avoid interruption of capture sessions, you should disable the screen saver.
- ❑ The drop frame compensation feature does not provide accurate compensation adjustments for tapes recorded in LP mode.
- ❑ For tapes that include a mixture of both SP and LP mode, the information displayed by the capture progress indicator may not be accurate.
- ❑ Make sure the video head of your digital video device is properly cleaned. Anomalies that you see in captured data could be due to dust or other particles on the video head.
- ❑ The last frame captured is one frame before your selected [OUT] point. The frame you see immediately after clicking the [OUT] button is not captured.

***When recording AVI files to tape:***

- ❑ Do not use DVgate when the connected digital video peripheral is in Timer Recording mode, as this could produce a malfunction in the peripheral.

 You can record only AVI files. MPEG files cannot be recorded.

- ❑ To avoid recording problems, such as a single frame appearing in multiple frames, close other applications on your system while recording.
- ❑ You cannot use different audio modes on the same tape. If you have AVI files that use different audio modes, they cannot be recorded at the same time, but must be recorded separately.
- ❑ Do not attempt to work with AVI files that are smaller than 4 MB.
- ❑ DVgate does not support hard disk compression. Do not use disk compression if you are planning to work with DVgate.
- ❑ In order to maximize recording capabilities, video and audio data are not available while you are recording.
- ❑ If DVgate indicates that frames have been dropped, close all open applications, or defragment your hard drive.

## ***Hard Drive Partition***

In order to improve the performance of your computer's DVgate software, the hard disk drive on your computer has been formatted with two partitions, C and D. DVgate saves files to the D partition. This prevents large video captures from consuming the available space on your C partition. To maintain optimum performance of DVgate, you should defragment your D partition regularly.

## **Defragmenting your Hard Disk Drive**

If you encounter frame dropping while recording digital video onto your hard disk drive, defragmentation may be necessary.

### **To defragment your hard disk drive:**

- 1 Deactivate your screen saver, if applicable.
- 2 From the Start menu, select Programs > Accessories > System Tools > Disk Defragmenter.
- 3 Run Disk Defragmenter.

 It may take more than a couple of hours to complete defragmentation, depending on the data capacity and utilization of your computer's hard disk drive(s).

## **i.LINK (IEEE1394) Compatibility**

Your VAIO computer includes a 4-pin i.LINK connector on the front of the system and a 6-pin i.LINK connector on the back of the system.

A 6-pin i.LINK connector can:

- supply power from the computer to the connected device if the device is equipped with a 6-pin connector, and
- supply 10V to 12V.

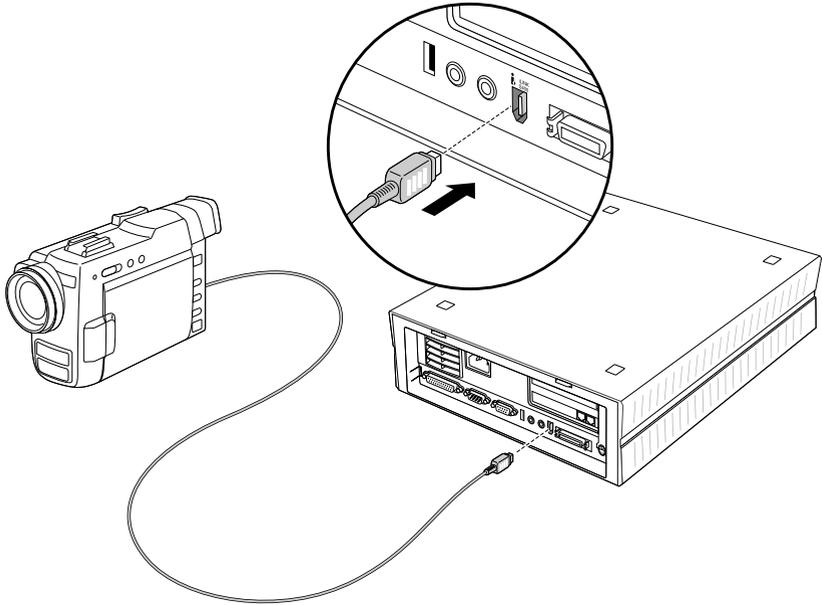
**! The total power supplied by the 6-pin i.LINK connector cannot exceed 6 watts.**

A 4-pin i.LINK connector cannot supply power to a connected device.

The following Sony i.LINK 400 Mbps cables are available and recommended for use with your computer: VMC-IL4415, VMC-IL4435, VMC-IL4615, VMC-IL4635, VMC-IL6615, and VMC-IL6635. Sony computer supplies, accessories, and peripherals can be purchased from your dealer or by contacting Sony at <http://www.sony.com/accessories>.

**To connect an i.LINK (IEEE1394) device**

- ❑ Use the **i** symbol to locate the **i.LINK** connector. Plug the i.LINK cable into this connector.



 See the manual that came with your i.LINK (IEEE1394)-equipped device for more information on setting it up and using it.

## **Enabling Smart Connect**

Your computer comes with preinstalled Smart Connect software. To enable faster startup, your computer ships with this software disabled.

### ***To enable Smart Connect:***

- 1** From the Start menu, select Settings > Control Panel.

The Control Panel window appears.

- 2** Click the System icon.

The System Properties window appears.

- 3** Click the Device Manager tab.

- 4** Click Sony i.LINK(1394) Adapter.

The Sony i.LINK(1394) Adapter window appears.

- 5** Click the Enable Device button.

- 6** Click OK.

The Sony i.LINK(1394) Adapter icon should no longer have an “X” on it. This means Smart Connect is now enabled.

- 7** Close all windows and restart your computer in order for the new settings to take effect.

Now your Smart Connect software is ready to use.



When you use Smart Connect to connect two VAIO computers, you must assign each computer a unique name by which it can be identified when the two computers are networked. See the Smart Connect online Help for more information.

## ***Enabling Ethernet***

Your computer comes with a preinstalled Ethernet interface. To enable faster startup, your computer ships with this function disabled. You may, however, enable Ethernet connectivity by following the instructions below.

### ***To enable the Ethernet connection:***

- 1** Right-click My Computer on the desktop and select Properties.
- 2** Click the Device Manager tab.
- 3** Select “Realtek RTL8139 (A/B/C/8130) PCI Fast Ethernet NIC” under the Network Adapters category.
- 4** Click Properties.
- 5** Click Enable Device and then click OK.
- 6** Click Close.

# System and Application Recovery CD(s)

## System Recovery CD(s)

*Sony Electronics*

The System Recovery CD 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 the Sony computer you purchased.

## Application Recovery CD(s)

*Sony Electronics*

The Application Recovery CD program allows you to reinstall individual applications and device drivers. Use it to restore corrupted or accidentally erased files.

## Using the System Recovery CD(s)

You can reinstall software titles that shipped with your computer if they are corrupted or accidentally erased. You may not need to recover the entire contents of your hard drive. If you experience a problem with your computer, reinstalling an individual device driver or software title may correct the problem.

 Use the Application Recovery CD program to reinstall individual applications or device drivers.

The System Recovery utility provides three options:

- ❑ **Full Restore without Format** — restores all the software titles that originally came with your computer without formatting the hard disk.

! **If you choose the Full Restore without Format option, you may need to reinstall applications that were not included with the computer when you purchased it. If you have any questions on using the System Recovery CD(s), contact Sony Customer Support.**

- ❑ **Full Restore with Format** — formats the hard disk drive and then restores all the original software. If your hard drive is partitioned into C and D drives, the computer will offer you the option to reformat the drive into a single partition.

- ❑ **Operating System Only** — formats the hard disk drive and restores the Windows operating system and the device drivers that shipped with your computer. This option is recommended for advanced users only.

**!** If you choose the **Full Restore with Format** or **Operating System Only** option, your hard disk will be formatted, which removes all the information on the hard disk drive. You will lose any software you have installed and any other files you have created since you started to use your computer. You must reinstall any applications that were not included with the computer when you purchased it.

### *To use the System Recovery CD(s):*

 You need to complete the Windows registration process when you use the System Recovery CD(s).

- 1 Insert the Sony System Recovery CD in the CD-RW drive.

 The System Recovery utility boots from the CD-RW drive. It must be in the drive when you turn on the computer.

- 2 Shut down your computer.
- 3 Wait 30 seconds and turn on your computer.
- 4 Click OK to signify you have read and accept the Microsoft End-User License Agreement.
- 5 When the System Recovery menu appears, follow the on-screen instructions to complete the recovery process.

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

The recovery process takes 30 to 60 minutes to complete.

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

## **Using the Application Recovery CD(s)**

The Application Recovery CD program allows you to reinstall individual applications and device drivers if they are corrupted or accidentally erased. Reinstalling an individual device driver or software title may correct a problem you are experiencing with your computer, and you may not need to recover the entire contents of your hard drive.

 If you do need to reinstall all the software titles that shipped with your computer, use the System Recovery CD(s).

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

### **To use the Application Recovery CD(s):**

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

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

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# Troubleshooting

This section describes how to solve common problems you may encounter when using your computer. Many problems have simple solutions, so try these suggestions before you call Sony Customer Support.

***Topic: My computer does not start.***

- Check that the computer is plugged into a power source and that it is turned on. Check that the power light is lit on the front panel of the computer.
- Confirm that a diskette is not in the diskette drive (unless you are using a bootable diskette).
- Confirm that the power cord and all cables are connected firmly, as described on the color poster.
- If you plugged the computer into a power strip or Universal Power Supply (UPS), make sure the power strip or UPS is turned on and working.
- Check that the display 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.
- Check that the computer is not in standby mode.

***Topic: My files are corrupted or deleted and I want to recover applications or drivers that came with my computer.***

See “Using the Application Recovery CD(s)” in this manual.

***Topic: My computer or software program “locks up.”***

- 1 Press Ctrl+Alt+Delete to close the application that is currently “locked up.”
  - 2 In the Close Program dialog box, scroll down until you locate “(Not responding)” next to an application.
  - 3 Select this application and click End Task. Windows attempts to close the application. If the attempt is unsuccessful, a second dialog box appears.
  - 4 Select End Task again.
- If you are unable to “unlock” the application, repeat the above steps but select Shut Down when the Close Program dialog box appears.

- ❑ If the above steps fail to “unlock” your computer, try the following steps:
    - 1 Save any unsaved work, if possible.
    - 2 Press Alt+F4.
    - 3 Select Restart.
    - 4 Click OK.
  - ❑ If you cannot restart as described in the preceding steps, you can restart the computer by pressing Ctrl+Alt+Delete or by pressing the power switch for more than six seconds.
-  Pressing Ctrl+Alt+Delete twice consecutively may result in the loss of changes made to files that are currently open.
- ❑ Contact the software publisher or designated provider for technical support. See the contact information in this manual.

***Topic: Why does Windows lock up during shutdown?***

The Windows® operating system may not shut down properly for many reasons, including incompatible or conflicting drivers, damaged files, or non-responsive hardware. For troubleshooting information, you can search Windows Help.

- 1 From the Start menu, select Help.
- 2 Click the Contents tab.
- 3 Click Troubleshooting and then click Windows 98 Troubleshooters.
- 4 Click the subject for which you want information, and then answer the questions that are appropriate for your problem.

***Topic: How do I change the parallel port type to ECP, EPP, or bi-directional?***

You can change the parallel port type using the System Setup utility (CMOS Setup Utility). To access System Setup:

- 1 From the Start menu, select Shut Down, and then select Restart.
- 2 When the Sony screen displays, press the F2 key on your keyboard.
- 3 Select the Advanced tab from the CMOS Setup Utility screen.

- 4 Select “I/O Device Configuration” and use the arrow keys to highlight Parallel Port Mode.

 You can toggle between the Normal (bi-directional), EPP, ECP, and ECP+EPP options using the Plus (+) or Minus (-) keys.

- 5 When the desired setting displays, press the Escape key.

***Topic: My CD drive tray does not open.***

- Use the eject button
  - 1 Make sure the computer is turned on.
  - 2 Press the Eject button on the drive.
- Use the My Computer icon
  - 1 Click the My Computer icon on the Windows® desktop.
  - 2 Right-click the CD-ROM icon.
  - 3 Select the Eject option from the pop-up menu.

***Topic: I cannot play a CD-ROM.***

- After inserting your CD, wait a few seconds for it to be detected before trying to access it.
- Make sure you place the disc in the tray with the label side facing up.
- Make sure the software is installed according to the program’s instructions.
- If your drive reads some CDs, but not others, check the shiny side of the disc for dirt or scratches. You may also need to clean the disc drive lens with an appropriate cleaner.

***Topic: I want to play a CD with my Microsoft CD Player.***

When you insert a music CD, the Sony Media Bar™ automatically launches to play your CD. When the Sony Media Bar is running, the Microsoft CD Player does not have access to the CD. Close Media Bar to use the Microsoft CD Player. If you do not hear any music, check all your volume controls.

**Topic: When I click an application icon, a message such as “You must insert the application CD into your drive” appears and the software does not start.**

- ❑ Some titles require specific files that are located on the application’s CD-ROM. Insert the disc and try starting the program again.
- ❑ Check to make sure you inserted the CD-ROM with the label side facing up.

**Topic: Why doesn't my CD-RW drive record at the highest speed?**

You must use 4x CD-RW/CD-R media to achieve optimum performance.

 The VAIO Slimtop computer has a maximum record rate of 4x for both CD-R and CD-RW media.

If you must use other media and are having difficulty formatting non-4x CD-RW media, change the write speed from 4x to a lower setting. To change the write speed from the default to a lower speed:

- 1 Click the My Computer icon on your desktop.
- 2 Right-click the CD-RW drive icon.

 Your CD-RW drive is assigned drive G as its default.

- 3 Select Properties.
- 4 Select the Settings tab.
- 5 Change the “Current Write Speed” field to 2x.

 1X writing is not supported.

- 6 Click OK.

**Topic: How do I change the video resolution of my display?**

- 1 From the Start menu, select Settings > Control Panel.
- 2 Click the Display icon and select the Settings tab.
- 3 Move the Display area slider to change the resolution.
- 4 Click OK.

***Topic: Why is there no sound in any application?***

There are independent controls for your system volume.

- ❑ Check that the speakers are plugged into the **HEADPHONES** connector.
- ❑ 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 the speakers use an external power source, make sure that the power cord is plugged into a grounded wall outlet or power strip.
- ❑ If the speakers have their own volume control, check the volume level.
- ❑ If the program you are using has its own volume control, check that the volume is turned up.
- ❑ Check the volume controls in the application, in the audio mixer, and in Windows. There is a volume control  on the Windows® taskbar. Click the icon and slide the level bar up to increase the volume.
- ❑ Check that the Mute check box is not selected in the Windows volume control .
- ❑ If you connected headphones to the computer, you will not hear sound from the speakers.

***Topic: My modem connection is slow.***

The computer's modem uses Lucent 1648 technology/V.90. Many factors influence modem connection speed, including telephone line noise or compatibility with telephone equipment (such as fax machines or other modems). If you think your modem is not connecting properly to other PC-based modems, fax machines, or your Internet Service Provider, check the following:

- ❑ Have your phone company check that your phone line is free from any line noise.
- ❑ If your problem is fax-related, check that there are no problems with the fax machine you are calling and that it is compatible with fax modems.
- ❑ For optimum performance, ensure you are calling an Internet Service Provider number that is V.90-compliant.
- ❑ 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 this line.

***Topic: My modem does not work.***

- ❑ Check that the phone line is plugged into the **LINE** jack.
- ❑ 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.
- ❑ Verify that the software you are using is appropriately configured to recognize and interact with the Sony computer modem. Call the software publisher if you do not know how to configure the software to recognize the modem. All programs preinstalled by Sony are compatible.
- ❑ If you suspect your modem is not functioning, you can perform a simple test to find out.

- 1 Click the My Computer icon on your desktop.
- 2 Click Control Panel.
- 3 Click Modems.
- 4 Click the Diagnostics tab.
- 5 Select COM3.
- 6 Click More Info.

If your modem is functioning, a More Info dialog box will display. If your modem is not functioning, an error message will appear.

***Topic: How do I change my modem to rotary or Touch-Tone dialing?***

- 1 Click the My Computer icon on your desktop.
- 2 Click Control Panel and then click Modems.
- 3 Click Dialing Properties.
- 4 Select the Tone dial or Pulse dial radio button next to “Dial using.”
- 5 Click OK.

***Topic: How do I set up faxing capability in Windows® 98 Second Edition?***

Windows® 98 Second Edition does not provide a built-in fax utility. Sony has included the Symantec WinFax™ Basic Edition software for your faxing needs.

- 1 From the Start menu, select Programs > Symantec WinFax Basic Edition > Configure WinFax Basic Edition.
- 2 Follow the on-screen instructions to configure the fax utility.

***Topic: My microphone does not work.***

Check that the microphone is plugged into the MIC connector.

***Topic: My microphone is too sensitive to background noise.***

If you find there is too much background noise when you record sound, you should adjust the microphone gain by following these steps:

- 1 Right-click the speaker icon (Volume) in the lower-right Windows® task tray.  
The Volume Control screen appears.
- 2 Click Open Volume Controls.  
The Volume Control screen appears.
- 3 In the Options menu, select Properties.  
The Properties screen appears.
- 4 Change the setting for “Adjust volume for” from Playback to Recording, then click OK.
- 5 Decrease the microphone level.
- 6 If available, click the Advanced button under Microphone Balance.  
The Advanced Controls for Microphone screen appears.
- 7 Deselect the check box for 1 Mic Gain (+20dB), then click the Close button.
- 8 Close the Recording Control window.

**Topic: My mouse does not work.**

- ❑ Check that the mouse is plugged into the **MOUSE** connector on the keyboard.
- ❑ There may be dust or dirt inside the mouse mechanism. To clean the mouse, follow these steps:
  - 1 Turn off your computer and turn the mouse upside down.
  - 2 Remove the mouse ball cover on the back of the mouse by turning clockwise the ring that covers the mouse ball.
  - 3 Turn the mouse upright, and drop the mouse ball into your hand.
  - 4 Using a piece of tape, remove any dust or dirt on the mouse ball and inside the mouse ball socket.
  - 5 Return the mouse ball to the socket, and replace the mouse ball cover. Secure the cover by turning the ring counter-clockwise.

**Topic: My mouse needs to be set up for left-hand use.**

- 1 Click the My Computer icon on your desktop.
- 2 Click Control Panel, and then click Mouse.  
The Mouse Properties dialog box appears.
- 3 In the Quick Setup tab, click Device Setup.
- 4 In the Device Setup Wizard dialog box, click Next.
- 5 Select the radio button next to “Left side of the keyboard.”
- 6 Click Next three times, and then click Finish.
- 7 Click Apply.

**Topic: My keyboard does not work.**

Check that the keyboard is plugged into the **KEYBOARD** connector.

**Topic: I cannot find the Windows® taskbar.**

- ❑ Check that the taskbar is not hidden or shrunk.
- ❑ Use the mouse to point to the left, right, top, and bottom edges of the screen.

***Topic: Why is my system running slowly?***

- ❑ The system responsiveness varies depending on the number of applications that are open and running. Close any applications that you are not currently using.
- ❑ Increasing the system memory may also help. The computer has two memory slots. For memory upgrades, use only 3.3V 64-bit PC-100 SDRAM DIMM modules. For information on installing memory, please see the online document *Upgrading and Maintaining Your VAIO® Computer*.

Sony computer supplies, accessories and peripherals can be purchased from your dealer or by contacting Sony at <http://www.sony.com/accessories>.

***Topic: My i.LINK® peripheral does not appear on the desktop.***

- 1 Turn off and disconnect your peripheral.
- 2 Reconnect your peripheral.
- 3 Then turn on the power.

***Topic: My connected printer doesn't function after the computer resumes from a power saving mode.***

When this occurs, follow the procedures below to reset the printer connection:

- 1 Right-click the My Computer icon on the desktop, and then select Properties.
- 2 Click the Device Manager tab.
- 3 Select Refresh, and then click OK.
- 4 The printer should now function properly.

***Topic: How do I enable my Ethernet interface?***

- 1 Right-click My Computer on the desktop and select Properties.
- 2 Click the Device Manager tab.
- 3 Select “Realtek RTL8139 (A/B/C/8130) PCI Fast Ethernet NIC” under the Network Adapters category.
- 4 Click Properties.

- 5 Click Enable Device and then click OK.
- 6 Click Close.

**Topic: How do I install a printer?**

 Always check the printer manufacturer's website for the latest drivers for Windows 98 before proceeding. Some printers do not function properly without updated drivers for Windows 98.

 If the printer has a USB connection, do not follow the steps below. Have the customer contact the manufacturer of their printer as they may have updates, other devices, or other information that the customer may need.

- 1 From the Start menu, select Settings > Printers.
- 2 Click Add Printer.
- 3 Click Next.
- 4 Select Local Printer and click Next.
- 5 Select the appropriate manufacturer and model and click Next.

 If the printer is not included in the list and the printer manufacturer included a disk with a Windows 98 Printer driver, choose Have Disk, enter the appropriate path for the disk or CD and click OK.

If the printer is not included on the list and no drivers are included with the printer, choose a driver for a printer that the printer emulates (acts like). Refer to the printer user's manual for specific emulation information.

- 6 Select LPT1 and click Next.
- 7 Click Yes to have Windows-based programs use this as the default printer.
- 8 Click Next.
- 9 Click No and then click Finish.

 If prompted for a path to the windows files, use C:\Windows\Options\Cabs.

***Topic: Why is there unusual activity on my floppy disk drive?***

If you notice that your system is slow to respond due to unusual floppy disk drive activity, it could be due to Find Fast. Removing Find Fast, if present, may help.

- 1 Right-click on the Windows taskbar and select Properties.  
The Taskbar Properties dialog box appears.
- 2 Click the Start Menu Programs tab.
- 3 Click the Remove button.  
The Remove Shortcuts/Folders dialog box appears.
- 4 Click on Startup to see its list of shortcuts.
- 5 Click Microsoft Find Fast.
- 6 Click the Remove button.
- 7 Click Close.
- 8 Click OK.

***To Reach Sony***

For further assistance, call 1-888-4SONYPC (1-888-476-6972).

***Notes on Use***

***On the Power Source***

- ❑ Your computer operates on 100–120 V AC 50/60 Hz only. If you are operating this computer outside of North America or Japan, please verify that the local AC specifications match before plugging in the computer.
- ❑ The total power draw of installed add-in cards must not exceed the specifications for the power supply. Do not overload the system by installing add-in cards that draw excessive current. The system is designed to provide 2 amps (average) of 5V power for each card in the system not to exceed a total of 10 amps. The total from +5V current draw in a fully-loaded system (with all the add-in card slots filled) must not exceed 10 amps. If you add components to the system that draw current from the power supply, the maximum combined +3.3V and +5V output must not exceed 70 watts.

- ❑ Plug all the power cords for your computer and its peripheral equipment into the same AC supply line. AC derived from different supply lines may result in voltage differences that can cause unstable operation or unwanted weak currents at the time of connection.
- ❑ Do not share the AC outlet with any other power-consuming equipment, such as copying machines or shredders.
- ❑ 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.
- ❑ If you live in an area that experiences frequent power fluctuations, you may want to purchase a UPS (Uninterrupted Power Supply). This device contains both a surge protector and a battery backup. The surge protector prevents damage to your computer caused by power surges. The battery backup safeguards your data during a brief period of power loss.
- ❑ The power control button on the front panel does not turn off the system AC power. To remove power from the system, you must shut down the computer as described in the User Guide and then unplug the AC power cord from the wall outlet or power strip.
- ❑ Do not place heavy objects on the power cord.
- ❑ Do not operate the system with the cover removed. Always reinstall the cover before turning on the system.
- ❑ 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.
- ❑ Before touching anything inside the computer, turn the system off and let it cool for ten minutes. This will ensure that the processor heat sink will not be hot.
- ❑ Do not attempt to open the power supply. There are no user-serviceable parts in the power supply. To avoid personal injury or damage to your equipment, refer the repair or replacement of the power supply to qualified personnel only.

## ***On Disposal of the Lithium Battery***

Dispose of the lithium battery properly. In some areas, the disposal of lithium batteries in household or business trash may be prohibited. You can return your unwanted lithium batteries to your nearest Sony Service Center or Factory Service Center. For the Sony Service Center nearest you, call 1-888-4SONY-PC (1-888-476-6972).

- ! **Do not handle damaged or leaking lithium batteries.**
- ! **The lithium battery may explode if mistreated. Do not disassemble it or dispose of it in fire.**
- ! **Replace the battery with a Sony CR2032 lithium battery. Using a type of battery other than a CR2032 may present a risk of fire or explosion.**

## ***On Handling***

- 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 it may damage the finish of your Sony computer.
- Should any solid object or liquid fall into the cabinet, keyboard, or mouse, shut down your computer and then unplug it. You may want to have the computer checked by qualified personnel before operating it any further.

## ***On Installation***

- Do not place your Sony computer in a location subject to:
  - Heat sources, such as radiators or air ducts
  - Direct sunlight
  - Excessive dust
  - 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 50°F (10°C)
  - High humidity, moisture, or rain
- 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 build-up. Do not place your computer on loose 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 from the back panel of your computer.
- ❑ 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.
- ❑ Always switch the power off before connecting your computer to peripheral equipment; otherwise, damage may occur to the integrated circuits in your computer.
- ❑ Your computer, keyboard, and mouse consist of high-precision electronic parts. Do not drop them or bump them against other objects.
- ❑ Your Sony computer will not work with party lines, cannot be connected to a coin-operated telephone, and may not work with multiple phone lines or a private branch exchange (PBX).
- ❑ If the telephone company makes a service call to your home or office and determines that your computer is responsible for the 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.

### ***On Moisture Condensation***

If your 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 problem occurs, unplug your computer, and contact your Sony Service Center.

### ***On Upgrading the System***

- ❑ The procedures described in the online document “*Upgrading and Maintaining Your VAIO® Computer*” assume familiarity with the general terminology associated with personal computers and with the safety

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practices and regulatory compliance required for using and modifying electronic equipment.

- ❑ Disconnect the system from its power source and from any telecommunications links, networks, or modems before you open the system or follow any of the procedures described in the online document *“Upgrading and Maintaining Your VAIO® Computer”*. Failure to do so may result in personal injury or equipment damage.
- ❑ Electrostatic discharge (ESD) can damage disk drives, add-in cards, and other components. Follow the procedures described in the online document *“Upgrading and Maintaining Your VAIO® Computer”* 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.
- ❑ When removing a slot cover, be careful not to damage components on the system board or add-in cards. You may need to temporarily remove add-in cards that are next to the slot cover you want to remove.

### ***On Handling an LCD Display***

- ❑ Do not leave the LCD directly facing the sun for a long period of time as it can damage the LCD.
- ❑ 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.
- ❑ A residual image may appear on the screen if the same image is displayed for a lengthy period of time. The image disappears after a period of time. You can use a screen saver to prevent residual images.
- ❑ 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.

### ***On Handling a CRT Display***

- ❑ Do not place the display near a strong magnetic force.
- ❑ Do not block the ventilation slots on the display.

### ***On Using the Hard Disk Drive***

- ❑ Do not place the computer in a location that is subject to vibration or shock.
- ❑ Do not move the computer during operation.
- ❑ Do not subject the computer to sudden changes in temperature.
- ❑ Do not turn off the power while the computer is accessing the hard disk drive.

### ***On Handling Diskettes***

- ❑ Do not open the shutter manually and touch the surface of the diskette.
- ❑ Keep diskettes away from magnets.
- ❑ Keep diskettes away from direct sunlight and other heat sources.

### ***On Handling CD Media***

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

### ***On Cleaning CD Media***

- ❑ Fingerprints and dust on the surface of a disc may cause read errors. Proper care of the disc is essential to maintain its reliability. Do not use solvents such as benzine, thinner, commercially available cleaners or anti-static spray, as they may cause damage to the disc.
- ❑ For normal cleaning, hold the disc by its edge and use a soft cloth to wipe the surface from the center out.
- ❑ If the disc is badly soiled, moisten a soft cloth with water, wring it out well, and use it to wipe the surface of the disc from the center out. Wipe off any remaining moisture with a dry soft cloth.

## Resources

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

<b>1</b>	<b>Quick Start</b>	Contains information on how to set up your computer quickly and easily.
<b>2</b>	<b>User Guide</b>	Contains information on how to get the most from your computer, find help, and solve common problems. Also includes product specifications.
<b>3</b>	<b>Electronic Documentation</b>	<i>QuickStart</i> and the <i>User Guide</i> are available electronically on your hard drive. Two additional documents, “ <i>Upgrading and Maintaining Your VAIO® Computer</i> ” and <i>Troubleshooting Help</i> are also available. To access these documents, click the Start button, point to Help Center, and then point to the desired document.
<b>4</b>	<b>Manuals and online help files that may accompany your preinstalled software</b>	Most manuals for preinstalled software are located on your hard disk drive as online help files. You can access online help files from the Help menu in a specific application. A printed manual is available for some applications.
<b>5</b>	<b>Knowledge Database</b>	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 Knowledge Database at <a href="http://www.sony.com/pcsupport">http://www.sony.com/pcsupport</a>
<b>6</b>	<b>Sony Fax-on-Demand</b>	This service provides you with answers to commonly asked questions. You can use this automated service to request a list of available topics and then select the topics that you want to receive. To contact the Sony fax-on-demand service, call 1-888-4SONYPC (1-888-476-6972). (Requires a fax machine or fax software.)
<b>7</b>	<b>Software Updates</b>	You can download the latest software updates and software patches for your Sony computer by selecting Software Updates on the Sony PC Support web page at <a href="http://www.sony.com/pcsupport">http://www.sony.com/pcsupport</a>
<b>8</b>	<b>VAIO Computer Reference Manual</b>	Provides detailed technical information about your computer's hardware. This document is available from Sony's website at <a href="http://www.sony.com/pcsupport">http://www.sony.com/pcsupport</a>

## **For Answers to Your Software Questions**

### **Sony Service Center**

For the Sony Service Center nearest you, call 1-888-4SONYPC (1-888-476-6972). This service is free of charge for 90 days after the original date of purchase.

### **Acrobat® Reader, Adobe PhotoDeluxe®, Adobe Premiere® LE (Adobe Systems Incorporated)**

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

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### **America Online® (America Online)**

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Web site	<a href="http://www.aol.com/">http://www.aol.com/</a>
phone	800-827-3338
hours	7 days a week, 6 AM - 2 PM ET

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### **AT&T WorldNet® Service (AT&T)**

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

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\* You must be a WorldNet Service customer to access online support.

### **CompuServe® 2000 (CompuServe Interactive Services)**

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Web site	<a href="http://www.compuserve.com/">http://www.compuserve.com/</a>
phone	800-848-8990

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**DirectCD, Easy CD Creator™ (Adaptec, Inc.)**

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Web site	<a href="http://www.adaptec.com/">http://www.adaptec.com/</a>
phone	408-945-8600
hours	M - F, 8AM - 5 PM PT

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**EarthLink TotalAccess™ (EarthLink Network, Inc.)**

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

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**McAfee's VirusScan® (Network Associates, Inc.)**

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Web site	<a href="http://support.mcafee.com">http://support.mcafee.com</a>
phone	408-988-3832
e-mail	<a href="mailto:cybr@nai.com">cybr@nai.com</a>
hours	M - F, 9 AM - 5 PM CT

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**PhotoPrinter™ 2000 Pro (ArcSoft, Inc.)**

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Web site	<a href="http://www.arcsoft.com">http://www.arcsoft.com</a> ; <a href="http://www.photoisland.com">www.photoisland.com</a>
phone	510-440-9901
e-mail	<a href="mailto:techsupport@arcsoft.com">techsupport@arcsoft.com</a>
hours	M - F, 8:30 AM - 5:30 PM PT

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**Quicken® Basic (Intuit, Inc.)**

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

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**Sony Applications (Sony Electronics, Inc.)**

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

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

**Sound Forge® (Sonic Foundry)**

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Web site	<a href="http://www.sonicfoundry.com/support/">http://www.sonicfoundry.com/support/</a>
phone	608-256-5555
fax	608-256-7300
e-mail	<a href="mailto:support@sonicfoundry.com">support@sonicfoundry.com</a>
hours	M - F, 8 AM - 7 PM CT

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**Windows® 98 Second Edition Operating System, Internet Explorer, Outlook® Express, Word 2000 (Microsoft Corporation)**

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

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

**WinFax™ Basic Edition (Symantec Corporation)**

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Web site	<a href="http://www.symantec.com/techsupp/">http://www.symantec.com/techsupp/</a>
phone	800-798-0850
fax	800-554-4403 in North America 541-984-2490 outside North America

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## Specifications

<b>Model</b>	<b>PCV-L640</b>
<b>Processor</b>	700 MHz * Pentium® III
<b>Hard Disk Drive</b>	30 GB†
<b>Standard SDRAM</b>	128 MB PC-100 SDRAM, expandable to 256 MB
<b>Video RAM</b>	8 MB SDRAM
<b>Graphics</b>	2X AGP 3D graphics hardware acceleration (ATi Rage™ 128 Pro 4XL)
<b>Sound Capabilities</b>	High fidelity 3D PCI audio Aureal AU8810
<b>Diskette Drive</b>	3.5" 1.44 MB FDD
<b>CD-RW Drive</b>	20X max. CD-ROM reading, 4X max. CD-R writing, 20X max. CD-R reading, 4X max. CD-RW writing, 14X max. CD-RW reading‡
<b>Modem</b>	Lucent 1648 technology/V.90 compatible data/fax modem (REN 0.7) **
<b>Expansion Capabilities</b>	Two PCI slots (both already filled)
<b>Connection Capabilities (Front)</b>	PC card (Card bus support) USB port Microphone Headphone Memory Stick media slot i.LINK (4-pin)
<b>Connection Capabilities (Rear)</b>	USB port Modem line (RJ-11) Phone line (RJ-11) Parallel (printer) Serial port VGA monitor LCD display Line In Line Out Keyboard i.LINK (6-pin) 10Base-T/100Base-TX Fast Ethernet LAN (RJ-45)

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<b>Model</b>	<b>PCV-L640</b>
<b>Connection Capabilities (Keyboard)</b>	Mouse (PS/2-style) left and right connectors
<b>Supplied Accessories</b>	Stand (for vertical installation) Power cable Phone cable Keyboard cable PS/2 Wheel Mouse VAIO Smart™ Convertible Keyboard and palm rest Four rubber feet (for bottom of the system) Ferrite core

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<b>Model</b>	<b>PCV-L640</b>
<b>Service</b>	90-day limited service. See Warranty Card. <sup>††</sup>
<b>Limited Warranty</b>	90-day parts/labor standard. See Warranty Card. <sup>††</sup>
<b>Power Requirements</b>	130 watts maximum
<b>Dimensions</b>	CPU: 11.2"(w) x 3.6" (h) x 13.4" (d) (280 mm x 90 mm x 335 mm) Keyboard: 15.9" (w) x 1.8" (h) x 7.1" (d) (398 mm x 45 mm x 178 mm) Display: 16.1" (w) x 13.1" (h) x 6.9" (d) (403 mm x 327 mm x 172 mm)
<b>Weight</b>	CPU: 11.9 lbs. (5.4kg) Display: 7.7lbs.(3.5kg) Keyboard: 2.9 lbs. (1.3kg)
<b>Operating Temperature</b>	50° F to 95° F (+10° C to 35° C)

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

† GB means one billion bytes when referring to hard drive capacity. Accessible capacity may vary.

‡ The CD-RW/CD-R/CD-ROM data transfer standard 1X rate is 150 kbytes/s.

Data on a CD-RW is read at a variable transfer rate, ranging from 6X at the innermost track to 14X at the outermost track. The average data transfer rate is 10X(1500 kbytes/s).

Data on a CD-R/CD-ROM is read at a variable transfer rate, ranging from 8X at the innermost track to 20X at the outermost track. The average data transfer rate is 14X(2100 kbytes/s).

Data on a CD-RW/CD-R is written at a constant transfer rate of 2X or 4X, depending on the speed you select.

\*\* Maximum speed for faxing is 14.4 kbytes/s. Your modem is capable of downloading at 56 kbytes/s using K56flex technology or V.90. Your phone service, online service, or Internet Service Provider, however, may not support this technology or operate at this speed.

†† Certain restrictions apply.

Specifications are subject to change without notice.

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