# PCG-SRX77/SRX77P

# **SERVICE MANUAL**

# For American Area

Ver 1-2002A Revision History



\$400

Canadian Model

Lineup : PCG-SRX77 PCG-SRX77P

-SRX77P Illust : PCG-SRX77P

• Design and specifications are subject to change without notice.

# NOTEBOOK COMPUTER

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All other trademarks are trademarks or registered trademarks of their respective owners. Other trademarks and trade names may be used in this document to refer to the entitles claiming the marks and names or their produces. Sony Corporation disclaims any proprietary interest in trademarks and trade names other than its own. <u>Caution Markings for Lithium/Ion Battery</u> - The following or similar texts shall be provided on battery pack of equipment or in both the operating and the service instructions.

CAUTION: 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.

CAUTION: The battery pack used in this device may present a fire or chemical burn hazard if mistreated. Do not disassemble, heat above 100°C (212°F) or incinerate. Dispose of used battery promptly.

Keep away from children.

CAUTION: Changing the back up battery.

- Overcharging, short circuiting, reverse charging, multilation or incineration of the cells must be avoided to prevent one or more of the following occurrences; release of toxic materials, release of hydrogen and/or oxygen gas, rise in surface temperature.
- If a cell has leaked or vented, it should be replaced immediately while avoiding to touch it without any protection.

## Service and Inspection Precautions

#### 1. Obey precautionary markings and instructions

Labels and stamps on the cabinet, chassis, and components identify areas requiring special precautions. Be sure to observe these precautions, as well as all precautions listed in the operating manual and other associated documents.

#### 2. Use designated parts only

The set's components possess important safety characteristics, such as noncombustibility and the ability to tolerate large voltages. Be sure that replacement parts possess the same safety characteristics as the originals. Also remember that the  $\triangle$  mark, which appears in circuit diagrams and parts lists, denotes components that have particularly important safety functions; be extra sure to use only the designated components.

## 3. Always follow the original design when mounting parts and routing wires

The original layout includes various safety features, such as inclusion of insulating materials (tubes and tape) and the mounting of parts above the printer board. In addition, internal wiring has been routed and clamped so as to keep it away from hot or high-voltage parts. When mounting parts or routing wires, therefore, be sure to duplicate the original layout.

#### 4. Inspect after completing service

After servicing, inspect to make sure that all screws, components, and wiring have been returned to their original condition. Also check the area around the repair location to ensure that repair work has caused no damage, and confirm safety.

#### 5. When replacing chip components...

Never reuse components. Also remember that the negative side of tantalum capacitors is easily damaged by heat.

#### 6. When handling flexible print boards...

- The temperature of the soldering-iron tip should be about 270C.
- Do not apply the tip more than three times to the same pattern.
- Handle patterns with care; never apply force.

Caution: Remember that hard disk drives are easily damaged by vibration. Always handle with care.

#### ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

LES COMPOSANTS IDENTIFÉS PAR UNE MARQUE A SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈSES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPÉMENTS PUBLIÉS PAR SONY.

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History of the changes is shown as the "Revision History" at the end of this data.

## 1-1. Flowchart



- P XX means pages that appears in this manual.
- Remember that hard disk drives are easily damaged by vibration. Always handle with care.

## 1-2. Main Electrical Parts Location Diagram



## **1-3. Removal** 1. HDD, Lid (HDD)



## 2. Keyboard Unit (J), Housing (Palmrest) Assy



## 3. Pad Touch, Speaker, SWX-86 Board, IFX-175 Board, Dial Unit Jog



## 4. Foot (R) Rear, Foot (L) Rear, Foot (R)



5. Display Assy



## 6. Holder (Heat Sink), Heat Sink, Fan DC, Card Modem





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# 9. Escutcheon (L) Assy, IFX-177 Board, Harness RJ-45, Escutcheon (R), CNX-148 Board, CNX-149 Board, IFX-178 Board



## 10. LCD Section – Made by TS – 1. Housing (Bezel) Assy



## 2. LCD Unit, Inverter Unit, Tilt (L), Tilt (R), Housing (Display) Assy



# CHAPTER 2. SELF DIAGNOSTICS

## ATTENTION

Please confirm "Self Diagnostics" method which will be informed you with distribution of "Self Diagnostics" software.

# CHAPTER 3. **BLOCK DIAGRAM**



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# CHAPTER 4. FRAME HARNESS DIAGRAM



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#### NOTE:

- The mechanical parts with no reference number in the exploded views are not supplied.
  Items marked " \* " are not stocked since they are seldom
- Items marked " \* " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- When two or more parts are shown in parallel, use the part described first as the main part.

The components identified by mark  $\triangle$  or dotted line with mark  $\triangle$  are critical for safety. Replace only with part number specified. Les composants identifiés par une marque

 $\triangle$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

## 5-1. Main Section

<u>Ref.No.</u>	<u>Part No.</u>	Description	<u>Ref.No.</u>	<u>Part No.</u>	Description
1	1-476-939-21	KEY BOARD UNIT (US)	67	4-659-832-01	SHEET, THERMAL
2	A-8066-903-A	ASSY HDD 20GB (H, 15F) (S)	68	4-659-844-01	SHEET (SCREW)
3	1-476-945-11	ENCODER, JOG	69	4-659-904-01	SHEET (MPCI)
4	1-544-951-21	SPEAKER	70	X-4624-183-2	LID (IV) ASSY
5	1-796-319-11	PAD, TOUCH	71	X-4624-184-2	LID (L) ASSY
6	1-823-571-11	CABLE, FLEXIBLE FLAT (SWX-TP)	72	4-657-990-31	(SRX77)LABEL (ID)
7	1-823-572-11	CABLE, FLEXIBLE FLAT	72	4-657-990-41	(SRX77P)LABEL (ID)
8	1-823-573-11	CABLE, FLEXIBLE FLAT	80	1-794-548-11	CONNECTOR, USB(A)
9	4-657-941-01	COVER (TP)	81	1-793-162-11	JACK, SMALL TYPE
10	4-657-944-01	SPRING (R), TORSION	82	1-695-514-21	JACK (SMALL TYPE) 1P
11	4-657-945-01	PLATE (TP)	83	4-660-264-01	PLATE (ANT)
* 12	4-657-949-01	HOLDER (SP)	84	4-660-234-01	SHEET (HEAT SINK)
13	4-657-950-01	WINDOW (MS)	85	4-660-233-01	PLATE (HEAT SINK), GROUND
14	4-657-951-02	LEVER	87	4-660-235-01	GASKET (A)
15	4-659-533-01	PLATE (L), GROUND	88	4-660-236-01	GASKET (B)
16	4-659-534-02	PLATE (R), GROUND	89	4-658-789-02	TAPE (HARNESS)
17	4-659-843-02	SHEET (TP)	90	4-660-756-01	SHEET (PULSE)
18	A-8067-041-A	COMPLETE PWB IFX-175	91	4-657-991-01	SHEET (JOG), INSULATING
19	A-8067-047-A	COMPLETE PWB SWX-86	92	4-661-037-02	SHEET (LAN), INSULATING
20	X-4624-198-5	HOUSING (PARM REST) ASSY	93	4-660-809-01	SHEET (GROUND PLATE R)
21	4-657-940-02	ESCUTCHEON (JOG)	94	4-660-808-01	SHEET (GROUND PLATE)
22	4-657-943-01	KNOB (LATCH)	95	4-660-807-01	SHEET (SPEAKER)
23	4-657-952-01	LEVER (LATCH)	96	4-661-076-01	SHEET (PW)
24	1-468-624-11	BATTERY, VANADIUM-LITHIUM	97	4-661-214-01	SHEET (MS), INSULATING
25	1-757-756-51	CABLE, COAXIAL (WITHUFLCONNECTOR	98	4-660-237-01	GASKET (C)
26	1-757-756-61	CABLE, COAXIAL(WITHUFLCONNECTOR	99	4-661-176-01	SHEET (USB)
27	1-761-380-23	CARD, MODEM	100	4-661-231-01	CUSHION (KNOB)
28	1-761-495-11	CARD, WIRELESS LAN	101	4-660-238-01	GASKET (D)
29	1-763-803-11	FAN, DC	102	1-816-204-11	CONNECTOR, PC CARD (EJECTOR)
30	1-823-569-11	CABLE, FLEXIBLE FLAT	103	4-660-752-01	TAPE (LCD)
31 32 33 34 36	1-823-570-11 1-960-827-41 1-961-480-11 1-961-483-11 4-657-957-01	CABLE, FLEXIBLE FLAT(MBX-CNX2) HARNESS (2 PIN) HARNESS, RJ-45 HARNESS (WITH DC JACK) ESCUTCHEON (R)	104 108 B1 B2	4-657-983-01 4-662-036-01 4-644-492-51 4-645-016-41	SHEET (PC CARD), INSULATING SHEET (FFC), INSULATING ACE (M2), LOCK ACE (M2) (DIA.4.6), LOCK
37	4-657-959-01	COVER (BR)	B3	4-654-273-11	ACE (M2), LOCK
* 38	4-657-963-01	HEAT SINK	B4	4-635-301-01	SCREW M3X4
* 39	4-657-971-01	BRACKET (K)	B5	4-644-492-11	ACE (M2), LOCK
* 40	4-657-975-01	HOLDER (HEAT SINK)	B6	4-659-529-01	BOLT
41	4-657-984-01	SHEET (MODEM), INSULATING	B7	7-621-772-10	SCREW +B 2X4
42 43 44 45 46	A-8067-039-A A-8067-040-A A-8067-043-A A-8067-044-A A-8058-500-A	COMPLETE PWB CNX-148 COMPLETE PWB CNX-149 COMPLETE PWB IFX-177 COMPLETE PWB IFX-178 C/P MBX-57 (P800) (S)			
47 48 49 50 * 51	X-4624-182-1 4-635-956-01 X-4624-185-1 1-761-453-11 4-657-969-01	HOUSING (BOTTOM) ASSY SPRING (B), COMPRESSION COIL ESCUTCHEON (L) ASSY PWB, FLEXIBLE PRINT (FOR HDD) BRACKET (HDF)			
* 52 53 54 55 56	4-657-970-01 4-657-964-01 4-657-986-01 4-657-981-01 4-657-977-01	BRACKET (HDR) LID (HDD) FOOT SHEET (HDD), INSULATING FOOT (R), REAR			
57 58 59 61 66	4-657-976-01 4-657-968-01 4-646-722-11 4-657-962-01 4-659-711-01	FOOT (L), REAR FOOT (R) BLIND, SCREW SPRING (C), TORSION SHEET (BOSS)			



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## 5-2. LCD Section – Made by TS –



Ref.No.	Part No.	Description	Ref.No.	Part 1
301 302 303 304 305	1-476-874-11 A-8058-499-A 1-961-376-12 4-657-928-02 4-657-929-02	INVERTER UNIT LCD ASSY(S) LCD HARNESS COVER (L) COVER (R)	▲ 801 ▲ 802 803	1-476 1-757 1-757
* 306 * 307	4-657-930-02 4-657-931-02	TILT (L) TILT (R)	804	1-756 4-660
309 310	4-657-933-01 X-4624-178-2	CLAMP (LCD) HOUSING (BEZEL) ASSY		4-660
311 312 313 314 315	4-646-976-21 4-657-985-01 4-659-342-01 X-4624-180-2 4-660-749-01	CUSHION (LATCH) CUSHION (BZ) BLIND (LCD), SCREW HOUSING (DISPLAY) ASSY GASKET (TILT)	<b>801</b> AC a	adaptor
316	4-661-728-02	SHEET (LCD, HARNESS)		
B20 B21	4-644-492-51 4-645-016-41	ACE (M2), LOCK ACE (M2) (DIA.4.6), LOCK		







No.	Description		
	ACCESSORIES		

- 1-476-943-11 ADAPTOR, AC 1-757-562-31 CORD, POWER 1-757-026-11 CABLE, VGA 1-756-100-41 BATTERY PACK, LITHIUM ION 4-660-339-01 SPECIFICATION SHEET, 2060UA
- 4-660-341-01 QUICK START, 2060UA



mponents identified by or dotted line with mark ritical for safety. e only with part number d.	Les composants identifiés par une marque $\Delta$ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

**SONY**.

# VAIO® Computer Quick Start

PCG-SRX77/PCG-SRX77P

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## Welcome

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

## Features

Here are just some of the features your VAIO® computer has to offer:

- Exceptional performance Your computer includes a fast Intel® Pentium® processor.\* To optimize performance and portability, Sony has implemented speed controlling technology designed to maximize battery life during mobile computer use. Windows® reported actual CPU speed may not reflect the maximum speed.<sup>†</sup>
- Portability The rechargeable battery pack provides hours of use without AC power.
- □ Wireless functionality Your computer can connect to a Local Area Network (LAN) and the Internet, all without direct cable connections.
- □ Sony audio and video quality A high-resolution LCD screen enables you to take advantage of today's advanced multimedia applications, games, and entertainment software.
- □ Microsoft® Windows® operating system Your system includes the Microsoft® Windows® operating system.
- □ **Communications** Access popular online services, send and receive e-mail, browse the Internet, and use fax features.

For a complete description of the specifications of your VAIO® computer, see the VAIO® Computer Specifications flyer supplied with your computer.

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<sup>\*</sup> The processor will be reduced under certain operating conditions.

<sup>†</sup> Depending on the specific model you purchased, speed controlling technology may not be present.

## **Unpacking Your Computer**

Remove the following hardware items from the box:

Main Unit



Power Cord



AC Adapter



Display Adapter



Rechargeable Battery Pack





Unpacking Your Computer

#### **Documents**

- VAIO® Computer User Guide A searchable online help file that contains detailed information on how to use your new notebook. To open this file, click Start on the Windows® taskbar, select Help and Support, and click VAIO User Guide.
- VAIO® Computer Quick Start Contains information on unpacking and setting up your notebook, the features of your notebook, and how to solve common problems.
- Microsoft® Windows® manual Explains how to use the basic features of the Windows operating system installed on your computer.
- □ *VAIO*® *Computer Notes on Use* Explains notes on using your notebook and offers safety tips.
- VAIO® Computer Specifications flyer Details the hardware specifications for your notebook.

## Software CD

Microsoft® Word — Enables you to reinstall Microsoft Word to the VAIO computer you purchased, if the application becomes corrupted or is erased.

#### **Recovery CDs**

- □ Application Recovery CD(s) Enables you to reinstall individual applications if they become corrupted or are erased.
- □ **Driver Recovery CD(s)** Enables you to reinstall individual device drivers if they become corrupted or are erased.
- □ System Recovery CD(s) Enables you to format the C:\ partition of the hard disk drive, then reinstall the operating system and software titles that shipped with your notebook if they become corrupted or are erased.

To use these recovery CDs, you need to purchase and connect an optical disc drive. See "Using Your Recovery CDs" on page 47 for information on how to use the recovery CDs.

## Other

- Packet containing special product offers
- □ Limited Warranty card

## **Registering Your Computer**

Take advantage of Sony's commitment to quality customer support and receive these benefits by registering your computer:

- □ Sony Customer Support Talk to a Support Representative to troubleshoot problems you may be having with your notebook.
- □ Limited Warranty Protect your investment. See the Warranty Card for more details.
- You are prompted to register your computer the first time you turn on the unit. Follow the on-screen instructions to complete the registration process. If you are not able to register your computer during the first session, you are provided with additional registration opportunities later.

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Setting up your dial-up connection

## Setting up your dial-up connection

This section describes the basic steps for setting up your dial-up connection. The Connection Wizard guides you through the process of connecting to the Internet and then choosing an Internet Service Provider (ISP) or setting up an existing account.

## Setting up your Internet connection

1 Click Start, point to All Programs, Accessories, Communications, and then click New Connection Wizard. The Location Information screen appears.

Location Information	? 🛛
	Before you can make any phone or modem connections, Windows needs the following information about your current location. What country/region are you in now? Inited States What area gode (or city code) are you in now? If you need to specify a carrier code, what is it? If you need to specify a carrier code, what is it? If you dial a number to access an gutside line, what is it? If you dial a number to access an gutside line, what is it? Define this location uses: If pone dialing Pulse dialing OK Cancel

#### Location Information screen

2 Follow the instructions onscreen and then click OK to continue. The Phone and Modem Options screen appears.





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## Phone and Modem Options screen

Phone and Moder	n Options ? 🛛
Dialing Rules	
b The list b location fr	low displays the locations you have specified. Select the om which you are dialing.
Locations:	
Location	Area Lode
Unity Locatio	555
	New Edit Delete
	OK Cancel Apply

**3** Select the location from where you are dialing and then click OK. The New Connection Wizard appears.





## New Connection Wizard

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New Connection Wizard			
<b>S</b>	Welcome to the New Connection Wizard		
	This wizard helps you:		
	Connect to the Internet.		
	<ul> <li>Connect to a private network, such as your workplace network.</li> </ul>		
K	<ul> <li>Set up a home or small office network.</li> </ul>		
	To continue, click Next.		
	< Back Next > Cancel		

4 Follow the onscreen instructions to finish setting up your Internet connection.





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## Setting Up Your VAIO Computer

This section describes the following topics:

- □ Locating the Controls and Ports
- □ Connecting a Power Source
- □ Starting Your Computer
- □ Shutting Down Your Computer
- □ Using Power Saving Modes



## Locating the Controls and Ports

Front

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Wireless LAN indicator	9	Memory Stick® media slot
Jog Dial control	10	Speaker
Jog Dial back button	11	Display
Left/Right buttons	12	Hard disk drive indicator
Touchpad	13	Num Lock indicator
Power indicator	14	Caps Lock indicator
Battery indicator	15	Scroll Lock indicator
Memory Stick indicator		
	Wireless LAN indicatorJog Dial controlJog Dial back buttonLeft/Right buttonsTouchpadPower indicatorBattery indicatorMemory Stick indicator	Wireless LAN indicator9Jog Dial control10Jog Dial back button11Left/Right buttons12Touchpad13Power indicator14Battery indicator15Memory Stick indicator

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Locating the Controls and Ports

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Left

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1	Speakers	6	Monitor port
2	Ethernet port	7	<b>i</b> .LINK® (IEEE 1394) S400 port
3	PC Card slot	8	Peripheral device DC Out port*
4	Wireless LAN on/off switch	9	Modem jack
5	PC Card release button		

\* Compatible with certain optical disc drives.

Right

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1	Memory Stick <sup>®</sup> media slot	4	<ul> <li>Microphone jack</li> </ul>
2	$\Psi$ USB port	5	Ventilation duct
3	∩ Headphone jack	6	- DC In port



Do not cover the ventilation duct while your computer is on.


Locating the Controls and Ports

# Bottom

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1	Battery lock/unlock lever	3	Ventilation fan	
2	Battery unlock lever	4	Reset button <sup>*</sup>	

\* To press reset button, use a thin, straight object (such as a paper clip).

# **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 port 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 Computer to AC Outlet



Use your notebook only with the supplied AC adapter. To disconnect your notebook completely from the main power source, unplug the AC adapter. Make sure that the electrical outlet is easily accessible.

Connecting a Power Source

## Notes on the AC adapter

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

# Using battery power

You can use a battery pack as a source of power. 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.

You can also purchase the high-capacity battery pack as a separate option.

## To insert the battery pack

- 1 Make sure the lock/unlock lever on the bottom of the computer is in the "unlock" position.
- 2 Align the grooves and tabs on the battery with the notches and tabs on the back of the computer. Slide the battery toward the computer until it clicks into place.

3 Slide the lock/unlock lever into the lock position.

## **Inserting Battery Pack**



# To charge the battery pack

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

The computer automatically charges the battery (the battery indicator light flashes in a double-blink pattern as the battery charges). When the battery is 85 percent full, the battery indicator light turns off. This process takes several hours. It takes longer to recharge the battery when the notebook is turned on than when it is turned off.

The →□ battery indicator indicates the status of the battery pack.





Connecting a Power Source

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# **Battery Indicator Light**



Battery Indicator Light Status	Meaning
On	The computer is using battery power.
Single-blink	The battery is running out of power.
Double-blink	The battery is charging.
Off	The computer is using AC power.

Let Both the battery and power indicators blink when the battery is running out of power.

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.

#### To remove the battery pack

- 1 Turn off the computer.
- 2 Slide the release levers to the Unlock position and slide the battery away from the computer.

#### **Unlocking Battery Pack**



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

You can purchase an optional, double-capacity battery, such as the Sony PCGA-BP4S model.

# Notes on batteries

- □ Never leave the battery pack in temperatures above 140° F (60° C), such as under direct sunlight or in a car parked in the sun.
- Battery life is shorter in a cold environment. This is due to decreased battery efficiency at low temperatures.
- □ Charge the batteries at temperatures between 50° F and 80° F (10° C to 30° C). Lower temperatures require a longer charging time.
- □ While the battery is in use or being discharged, the battery pack heats up. This is normal and is not cause for concern.
- □ Keep the battery pack away from all sources of heat.
- □ Keep the battery pack dry.

- □ Do not open or try to disassemble the battery pack.
- Do not expose the battery pack to any mechanical shock.

#### Connecting a Power Source

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- □ 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.
- 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 your battery level falls to less than 10 percent, you should either attach the AC adapter to recharge the battery or shut down your computer and insert a fully-charged battery.
- □ You can extend battery life by changing the power management modes in the PowerPanel<sup>TM</sup> utility. See "Using Power Saving Modes" on page 27.
- □ 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.

# Conserving battery power

When using the notebook computer with a battery, the LCD display and the hard drive can be set to switch off automatically to conserve battery power (Power Management function). Refer to "Using Power Saving Modes" on page 27 for more information.

# **Starting Your Computer**

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

# **Opening Your Computer**





2 Slide the power button to the right, until the green power indicator turns on.

#### Turning on Your Computer



- If you slide the power button to the right and hold it in that position for at least four seconds, the computer turns off. This operation may result in data loss.
- **3** If necessary, adjust the brightness controls for the LCD display. To decrease the brightness, press Fn+F5 and then the down or left arrow key. To increase the brightness, press Fn+F5 and then the up or right arrow key.



# Shutting Down Your Computer

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

- 1 Click Start on the Windows® taskbar.
- 2 Click Turn Off Computer at the bottom of the Start menu to display the "Turn off computer" dialog box.
- 3 Select Turn Off.

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Respond to any prompts warning you to save documents.

- 4 Wait for your computer to turn off automatically. The power indicator turns off.
- 5 Turn off any peripheral devices connected to your computer.
- During a period of inactivity, you can conserve battery life by using Standby mode. See "Controlling Power Management" in your online User Guide for more information.

#### 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 all USB devices.
- 2 Restart the notebook. You can restart your notebook by pressing the Ctrl+Alt+Delete keys simultaneously. This displays Windows Task Manager, from which you can select Restart.
- If you are still unable to shut down the notebook, you can slide the power button to the right and hold it for at least four seconds. This operation may result in data loss.



Using Power Saving Modes

# Using Power Saving Modes

When you use a battery as the source of power for your computer, you can take advantage of power management settings to conserve battery life. In addition to the normal operating mode, which enables 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 to 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 displays green when your notebook 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 flashes in this mode.

#### To activate Standby mode

- 1 Press the key combination Fn+Esc. You can also use the PowerPanel<sup>™</sup> utility to enter Standby mode.
- 2 Press any key to return to normal mode.

## Hibernate mode

In the Hibernate mode, the state of the system is saved on the hard disk drive and power is turned off. The power indicator is off in this mode.



# To activate Hibernate mode

1 To activate Hibernate mode, press the key combination Fn+F12, or press the power button and release it immediately. The "Save to Disk Manager" screen appears and the computer enters Hibernate mode.

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

2 Press the power button to return to normal mode.

# Notes on power saving modes

- □ Standby uses more power than Hibernate.
- □ Standby requires less time than Hibernate to return to normal mode.



# Adding Memory

In the future you may want to install memory modules to expand the functionality of your computer. See the Specifications flyer supplied with your computer for the amount of memory preinstalled on your computer. Expansion memory modules are available as options. For memory upgrades, use only unbuffered PC100 (CL2) SDRAM µDIMM modules. (Sony offers the optional 128 MB PCGA-MM128T memory module.)

*This section provides you with information on removing and replacing a memory module:* 

- Precautions and Procedures
- □ Removing a Memory Module
- □ Installing a Memory Module
- Confirming Added Memory Capacity

# **Precautions and Procedures**

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

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

Be careful when installing a memory module in your computer, and be sure to observe the proper safety precautions listed below. Mistakes that occur when installing or removing a memory module may cause a malfunction.

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

# Typical expansion memory configuration

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



Installing a Memory Module

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# Installing a Memory Module

To add a memory module, proceed as follows:

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

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

**Removing Bottom Screws** 



5 Slide the LCD lock lever and lift the cover.

6 Slide the keyboard toward the LCD display, then lift it away slightly.

## Lifting the Keyboard



- 7 Lift the keyboard from the LCD display side.
- 8 Gently turn the keyboard over the touchpad. Take care not to detach the cable when lifting the keyboard.
- **9** Touch a metal object (such as the connector panel on the back of your computer) to discharge static electricity.
- 10 Remove the existing memory module.

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11 Remove the new memory module from its packaging.

Installing a Memory Module

12 Install the memory module by sliding the module into the open slot.

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

#### Installing New Memory Module

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- 13 Snap the connectors into place when the board is correctly seated.
- 14 Close the computer cover and replace the three (3) fastening screws on the bottom of the computer.



Bass\_QuickStart.book Page 34 Friday, November 30, 2001 12:22 PM

VAIO® Computer Quick Start

# Removing a Memory Module

- 1 Turn off the computer and all peripheral devices.
- 2 Disconnect the power cord and all cables from the computer, and remove the battery.
- **3** Wait for the computer to cool down.
- In the interior of the computer becomes extremely hot during operation. Wait at least one hour for the computer to cool down before you remove the screws.
- 4 Use an appropriate screwdriver to loosen and remove the three screws at the bottom of the computer.

 $\underline{\bigwedge}$  To avoid damaging the computer, do not remove or loosen any other screws.

# **Removing Bottom Screws**



5 Slide the LCD lock lever and lift the cover.





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6 Slide the keyboard toward the LCD display, then lift it away slightly.

## Lifting the Keyboard



- 7 Lift the keyboard from the LCD display side.
- 8 Gently turn the keyboard over the touchpad. Take care not to detach the cable when lifting the keyboard.
- **9** Touch a metal object (such as the connector panel on the back of your computer) to discharge static electricity.
- **10** Remove the memory module by pulling out the tabs (see arrows No. 1), and pulling out the module in the direction of arrow No. 2.

#### Removing a Memory Module



- 11 Gently replace the keyboard, then press it into your computer.
- 12 Close the computer cover and replace the three (3) fastening screws on the bottom of the computer.

# **Confirming Added Memory Capacity**

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

## Sony Notebook Setup Dialog Box

👋 Sony Notebook Setup	? X
About This Computer Initial Setting Touchp	ad Power On Password Bass Boost
System information	
System information CPU: Clock Frequency: System Memory: Cache Memory: Internal HDD:	Product information Manufacturer: Sony Corporation Model Name: Service Tag Number: Serial No.: BIOS Version: OS Version: OS Serial No.:
SONY	DEM Information: Sony Electronics Inc.
OK Cancel	Apply Default Help



# About the Software on Your Computer

Your VAIO® computer 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
- Details on your Sony application, driver, and system recovery CDs



# Overview

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

# Adobe Acrobat® Reader<sup>TM</sup>

# Adobe Systems Inc.

Acrobat Reader software enables 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 Photoshop® Elements

#### Adobe Systems Inc.

Using state-of-the-art image editing tools, you can unleash your artistic ability and create digital images for print, e-mail and posting to the Web. The versatile image capturing options allow you to start working with digital and traditional photos immediately. Explore endless creative possibilities for your personal images with Adobe Photoshop Elements.

## 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.

## Apple QuickTime<sup>™</sup>

## Apple Computer Inc.

QuickTime is the Apple technology that makes video, sound, music, 3D, and virtual reality come alive for our Internet browser and Windows.

About the Software on Your Computer

#### 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.

#### DigitalPrint

#### Sony Electronics Inc.

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

#### **DVgate**<sup>тм</sup>

#### Sony Electronics Inc.

Connect a digital video camera recorder to the i.LINK®<sup>\*</sup> connector and capture your own video clips and still images. You can edit the 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<sup>TM</sup> Network Total Access

#### EarthLink Network Inc.

An Internet Service Provider that supplies access, information, and assistance to its customers, introducing them to the Internet. Member benefits include e-mail, newsgroups, a Personal Start Page, a free 6 MB Web site, a member magazine, and 24-hour technical support.

<sup>\*</sup> i.LINK is a trademark of Sony used only to designate that a product contains an IEEE1394 connection. The i.LINK connection may vary, depending on the software applications, operating system and compatible i.LINK devices. All products with an i.LINK connection may not communicate with each other. Refer to the documentation that came with your compatible i.LINK device for information on operating conditions and proper connection. Before connecting compatible i.LINK PC peripherals to your system, such as a CD-RW or hard disk drive, confirm their operating system compatibility and required operating conditions.

#### **Microsoft® Internet Explorer**

#### Microsoft Corp.

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

#### Microsoft® Office XP Professional (On selected models)

#### Microsoft Corp.

Microsoft Office XP redefines the relationship between people and software by providing a smarter, simpler way of working. New Office XP features include context-sensitive smart tags, enhanced formatting options, and more, that enable you to continually integrate additional services into Office and access information anytime.

#### Microsoft® Word

## Microsoft Corp.

Microsoft Word 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 also extends that easeof-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.

#### PC-Cillin® 2000

#### Trend Micro, Inc.

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

About the Software on Your Computer

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#### **PictureGear™**

Sony Electronics Inc.

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

#### Quicken®

## Intuit, Inc.

Quicken 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.

#### **Real Jukebox**®

#### RealNetworks Inc.

RealJukebox is one of the world's most widely used personal music management systems. Using RealJukebox, you can capture the contents of a music CD, manage and play back your music, and view various music-related information via the Internet. This Custom RealJukebox for Sony allows seamless check-out capabilities to a wide range of Sony personal audio devices, and offers convenient links to Sony product and music service home pages.

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

Sony recommends using the preinstalled SonicStage software's Record function to create any CDs on your VAIO® computer, if the specific model you purchased is preconfigured with all necessary components for CD-R and CD-RW capability. Downloading the optional RealJukebox CD-burning component to create any CDs on your computer may interfere with normal system operations.

#### **RealPlayer**®

#### RealNetworks Inc.

RealPlayer is the RealNetworks video and audio player which lets you access 2,500 radio stations featuring music, news, and sports.

#### **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®<sup>\*</sup> 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.

#### SonicStage

Sony Electronics Inc.

This new jukebox application adds a host of new features to its predecessor, OpenMG<sup>™</sup> Jukebox. Continuing to take advantage of Sony's copyrightprotected ATRAC3<sup>™</sup> format for high-quality digital audio storage, SonicStage sports a new Music Visualizer, a sleek new player skin design, audio CD burning capability, and a parametric equalizer for fine-tuning audio playback.

#### Sony on Yahoo!

Yahoo! Inc.

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

#### VAIO Action Setup

Sony Electronics Inc.

VAIO Action Setup manages the settings for your computer's Jog Dial control and i.LINK interface.

#### VAIO Support Agent

Sony Electronics Inc. VAIO Support Agent provides immediate, interactive online support.

<sup>\*</sup> i.LINK is a trademark of Sony used only to designate that a product contains an IEEE1394 connection. The i.LINK connection may vary, depending on the software applications, operating system and compatible i.LINK devices. All products with an i.LINK connection may not communicate with each other. Refer to the documentation that came with your compatible i.LINK device for information on operating conditions and proper connection. Before connecting compatible i.LINK PC peripherals to your system, such as a CD-RW or hard disk drive, confirm their operating system compatibility and required operating conditions.

About the Software on Your Computer

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## **VisualFlow**<sup>™</sup>

Sony Electronics Inc.

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

## WinDVD®

InterVideo Inc.

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



# DVgate application notes

# Digital video captures

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

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

# Adjusting image resolution

If the images on the LCD do not display smoothly, the resolution may not be set correctly. To check the resolution, click the Setup button in the DVgate Motion-Monitor window. Point to Settings, and then select Low Resolution. The settings you change in this menu affect the images in the monitor window only. Movie data imported to your hard drive and images recorded to DV devices will not be affected.

# Hard disk drive partition

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

DVgate application notes

# To defragment a partition

 $\underline{ \ } \qquad \qquad Before \ you \ begin \ to \ defragment \ a \ partition, \ make \ sure \ you \ back \ up \ all \ files \ that \ you \ want \ to \ save.$ 

- □ Click the Start button in the Windows® taskbar.
- □ Click Programs, Accessories, System Tools, and then click Disk Defragmenter. The Disk Defragmenter window appears.

Select the drive you want to defragment from the list, and click the Defragment button. See Windows® Help for more information on defragmenting.



# Application, Driver, and System Recovery CDs

Your computer is supplied with the following application, driver, and system recovery CDs. To use your recovery CDs, see "Using Your Recovery CDs" on page 47 for more information.

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

Sony Electronics Inc. This CD enables you to reinstall individual applications if they become corrupted or are erased.

#### **Driver Recovery CD(s)**

*Sony Electronics Inc.* This CD enables you to reinstall individual device drivers if they become corrupted or are erased.

## System Recovery CD(s)

Sony Electronics Inc.

This CD enables you to format the C:\ partition of the hard disk drive, then reinstall the operating system and software titles that shipped with your computer, if they become corrupted or are erased. Use it to restore the hard disk of the VAIO® computer you purchased. This CD restores your computer to its original state, so user data and applications will be lost.

Using Your Recovery CDs

# Using Your Recovery CDs

The following sections describe how to use the Application Recovery, Driver Recovery, and System Recovery utilities. You must connect an optional optical disc drive to use the Application, Driver, and System Recovery CDs.

# To use 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 disk drive. If you need to reinstall all the software titles that shipped with your computer, use the System Recovery CD(s). See "To use the System Recovery CD(s)" on page 50 for more information.

- If 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.
- 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.

# To use the Driver Recovery CD(s)

The Driver Recovery CD utility enables you to reinstall individual drivers and repair software applications if they become corrupted or are 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, an application repair utility, uses a vault feature on the Driver Recovery CD during its software healing process.

If you need to reinstall all of the software applications that shipped with your computer, use the System Recovery CD.

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

#### Reinstalling specific drivers with the Driver Recovery CD

- **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 into the optical disc drive.
- **3** Click Start in the Windows taskbar, then Control Panel. The Control Panel window appears.
- 4 Click Performance and Maintenance, then System. The System Properties dialog box appears.
- 5 From the Hardware tab, click Device Manager.
- 6 Click with the left mouse button to highlight the device for which you wish to reinstall the driver.
- 7 From the Actions menu, choose Properties. Properties dialog box for that device appears.

Using Your Recovery CDs

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# Properties dialog box

Unknown	device Proper	ties	? 🗙
General	Driver		
$\diamond$	Unknown device		
	Device type:	Other devices	
	Manufacturer:	Unknown	
	Location:		
Device	e status		
To reinstall the drivers for this device, click Reinstall Driver.			
		Reinstall Driver	
<u>D</u> evice (	usage:		
Use this	s device (enable)		~
		ОК	Cancel

- 8 Click Reinstall Driver. The Hardware Update Wizard appears.
- 9 Click Next. The wizard will search for the correct driver on your Driver Recovery CD.
- **10** When the recovery process is complete, click Finish. Some drivers will require that you reboot the computer to complete installation.

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# To use the System Recovery CD(s)

# This CD restores your computer to its original state, so user data and applications will be lost.

You can use the System Recovery CD(s) to reinstall the operating system and software titles that shipped with your computer if they become corrupted or erased. You may not need to reinstall the entire contents of your hard disk 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 use the Driver Recovery CD(s) to reinstall device drivers. See "To use the Application Recovery CD(s)" on page 47 or "To use the Driver Recovery CD(s)" on page 48 for more information.

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 computer you purchased.

The System Recovery utility will perform a Full Restore with Format. 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.

- 1 Insert the Sony System Recovery CD in the optical drive.
- 2 Shut down your computer as described in the "Shutting Down Your Computer" section of your printed Quick Start.
- **3** Wait four seconds and turn on your computer.
- 4 Select OK to signify you have read and accept the Microsoft® End-User License Agreement.

Using Your Recovery CDs

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- 5 When the System Recovery menu appears, follow the on-screen instructions to complete the recovery process.
- The System Recovery process restores the D: partition of your computer's hard disk drive in the NTFS file system format.

#### 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 more 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 next CD once the information from the previous CD has been installed.

The recovery process takes from 30 minutes 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 to automatically complete recovery of your system.

# **Recovering Microsoft Word**

If you recover your operating system using the System Recovery CD, use the supplied Microsoft® Word CD-ROM to recover this application. The basic version of Word is preinstalled; you may load other Word options from the Word Application CD.


# Troubleshooting

This section describes how to solve some basic problems you may encounter when using your computer. For more troubleshooting topics refer to the online VAIO® User Guide. Many problems have simple solutions, so refer to these sources before you contact Sony Computing Support (http://www.sony.com/pcsupport).

### My computer does not start.

- Check that the computer is plugged into a power source and that it is turned on. Check that the power indicator on the front panel of the computer indicates that the power is on.
- Check that the battery pack is inserted properly and is charged.
- □ If you have connected an external floppy disk drive, make sure there is no floppy disk in the floppy disk drive.
- Confirm that the power cord and all cables are connected firmly. See "Connecting Peripheral Devices" in the online VAIO User Guide for more information.
- □ If you plugged the computer into a power strip or Uninterruptible Power Supply (UPS), make sure the power strip or UPS is turned on and working.
- □ If you are using an external display, 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 supplied with your display for details.
- □ Condensation may cause the computer to malfunction. If this occurs, do not use the computer for at least one hour.
- Unplug the power cord, press the reset button by using a thin, straight object (such as a paper clip), remove battery pack, plug it in again and turn on the power.

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

#### My computer starts, but a BIOS error appears.

- ❑ When the computer's 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 the F2 key. 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 computer restarts.

# *My* computer starts, but the message "Operating system not found" appears and Windows does not start.

- □ If you have connected an external floppy disk drive, make sure there is no floppy disk in the floppy disk drive (non-bootable).
- □ If a non-bootable disk is in the drive, follow these steps:
  - 1 Turn off the computer, and then remove the floppy disk.
  - 2 Restart the computer and confirm that Windows starts properly.
- □ If Windows still does not start, follow the steps below to initialize the BIOS:
  - 1 Remove any disk from the floppy disk drive.
  - 2 Remove any peripheral devices connected to the computer.
  - **3** Turn off the computer and then turn it on.

- 4 Press the F2 key when the Sony logo appears. The BIOS setup menu screen appears.
- 5 Press the directional arrow keys to select the Exit menu.

Troubleshooting

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

If your computer continues to display the message "Operating system not found," and Windows does not start, contact Sony Computing Support.

#### My computer stops responding or does not shut down.

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

- Try restarting the computer. On the Windows taskbar, click the Start button, click Turn Off Computer, and then click Restart.
- □ If you cannot restart as described in the preceding step, you can restart the computer by pressing the Ctrl+Alt+Delete keys at the same time. The Windows Task Manager dialog box appears, and you can turn off the computer from the Shut Down menu.
- □ If the previous step does not work, press and hold the power button for at least four seconds. This turns off the power to the computer.
- □ If your computer stops responding while playing a CD or DVD, stop the CD/DVD, and restart the computer by pressing the Ctrl+Alt+Delete keys at the same time. The Windows Task Manager dialog box appears, and you can restart the computer from the Shut Down menu.
- □ Unplug the computer from the AC adapter and remove the battery pack from your computer.
- Pressing the Ctrl+Alt+Delete keys to turn off the computer via Windows Task Manager, or turning off the computer with the power switch may result in data loss in files that are currently open.

# The Power Management setting is not responding.

Your computer's operating system may become unstable if it is interrupted or if you attempt to make changes before the computer completely enters a lower power mode, such as Hibernate.

□ To restore the computer to its normal operating stability:

- 1 Close all open applications.
- 2 Restart the computer by pressing the Ctrl+Alt+Delete keys at the same time to display Windows Task Manager, and then selecting Restart from the Shut Down menu.

If this procedure does not work, press and hold the power button for at least four seconds to shut down the computer.

# My LCD screen is blank.

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

#### My mouse does not work.

- □ If you are using an external mouse, check that the mouse cable is plugged into the USB port. See "Connecting a USB Mouse" in the online VAIO User Guide for details. Note that a serial mouse or PS/2® mouse is not compatible with this computer.
- Reinstall the mouse/touchstick drivers. See "About the Software on Your Computer" on page 37 for more information.

Troubleshooting

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# My touchpad does not work properly.

You may have disabled the touchpad without a mouse being connected to the notebook. To enable the touchpad:

- 1 Press the Windows® key and use the arrow keys to select All Programs, and then Sony Notebook Setup.
- 2 Select the Touchpad tab using the arrow keys.
- **3** Select Enable Touchpad, either by pressing the Tab key or the Alt+"E" keys, and then press Enter.

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 Press the Windows key and use the arrow keys to select Control Panel. The Control Panel dialog box appears.
- 2 Press the Tab key until Printers and Other Hardware is highlighted, then press Enter. The Printers and Other Hardware dialog box appears.
- **3** Press the Tab key again, until Mouse is highlighted, then press Enter. The Mouse Properties dialog box appears.
- 4 Change the button assignments in the Mouse Properties dialog box, using the Tab key and arrow keys. (One of the buttons is assigned to the double-click action.) Press Enter.

If this procedure does not work, ensure that another mouse was not installed. You may need to use your supplied Driver Recovery CD(s) to reinstall the mouse drivers. See "To use the Driver Recovery CD(s)" on page 48 for more information.

# *The pointer does not move while I am using the Touchpad or Mouse.*

- □ The computer should be restarted. Follow these steps:
  - 1 Press the Windows key.
  - 2 Press the "U" key to select Turn Off Computer / Shut Down, and wait at least four seconds.

- 3 Press the "R" key to restart your computer.
- If you cannot restart your notebook as described in the step above, press Ctrl+Alt+Delete simultaneously to display Windows Task Manager, press Alt+"U" to display the Shut Down menu, and press "R" to restart the computer.
- □ 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 simultaneously to stop playback, display the Windows Task Manager and enable you to restart the notebook by selecting Restart from the Shut Down menu.
- □ If this procedure does not work, ensure that another mouse was not installed.
- □ You may need to use your supplied Driver Recovery CD(s) to reinstall the touchpad drivers. See "To use the Driver Recovery CD(s)" on page 48 for more information.

## My software program stops responding or crashes.

Contact the software publisher or designated provider for technical support. See "About the Software on Your Computer" in the online VAIO User Guide for more information.

# Getting Help

Sony provides you with several support options to answer questions about your VAIO® computer or the preinstalled software. Refer to these resources in the order they are listed.

# Support Options

1	<i>VAIO</i> ® <i>User Guide</i> and <i>VAIO</i> ® <i>Quick Start</i> The online VAIO® Computer User Guide and printed VAIO® Computer Quick Start provide you with information on how to maximize your computer capabilities and solve common problems. To access the online user guide, click Start on the Windows® taskbar, select Help and Support, and click on VAIO User Guide.
2	Manuals and Online Help Files The software preinstalled on your computer may come with an online manual. These manuals are stored on the hard disk drive as online help files. You can find the help files from the Help menu under the specific software application. Some software applications may come with a printed manual.
3	<b>Operating System Online Support</b> Your computer comes preinstalled with Microsoft® Windows®. For operating system support, access Sony Computing Support at: http://www.sony.com/pcsupport.
4	VAIO Support Agent You can find VAIO Support Agent by clicking Start and then selecting Help and Support. Using advanced diagnostic technology, Sony's VAIO Support Agent runs scheduled protections of your applications, network settings, and other important software settings. When your software is protected, you can use VAIO Support Agent to repair software problems by restoring your software to any of the previously protected states.

# 5 Sony Computing Support

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

# 6 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: 1-888-4-SONY-PC (1-888-476-6972).

# 7 Sony Customer Support

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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: 1-888-4-SONY-PC (1-888-476-6972).



# Software Support Information

# Adobe Acrobat<sup>®</sup> Reader<sup>™</sup>, Photoshop<sup>®</sup> Elements (Adobe Systems, Inc.)

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 (PST)

## America Online® (America Online, Inc.)

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

# Apple QuickTime<sup>™</sup> (Apple Computer Inc.)

Web site	http://www.apple.com
phone	800-692-7753
hours	7 days a week, 24 hours a day

## ArcSoft PhotoPrinter® 2000 Pro (ArcSoft, Inc.)

Web site	http://www.arcsoft.com	_
e-mail	support@arcsoft.com	
phone	510-440-9901	
fax	510-440-1270	
hours	M-F 8:30 AM - 5:30 PM (PST)	

# EarthLink<sup>™</sup> Network Total Access (EarthLink Network Inc.)

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

## PC-Cillin® 2000 (Trend Micro, Inc.)

Web site	http://www.antivirus.com/pc-cillin	
phone	949-387-7800	
e-mail	support@trendmicro.com	
hours	M-F 8 AM - 5 PM (PST)	

# Quicken® (Intuit Inc.)

Web site	http://www.intuit.com/support	
phone	800-644-3193	
hours	7 days a week, 24 hours a day	

#### RealJukebox®, RealPlayer (Real Networks, Inc.)

Web site	http://service.real.com/rjoptions.html
e-mail	http://service.real.com/help/call.html

# Sony Applications (Sony Electronics Inc.)

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

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

## Windows® Operating System, Internet Explorer, Word (Microsoft Corp.)

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

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

#### WinDVD® (InterVideo, Inc.)

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

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Sony Service Center

# Sony Service Center

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





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