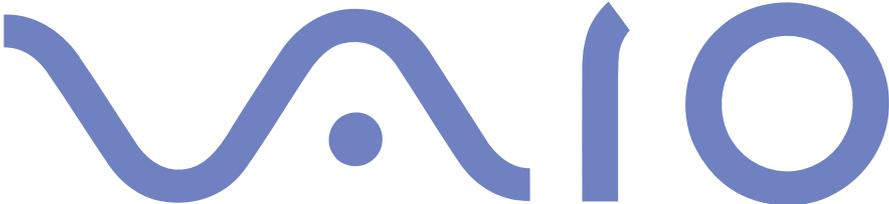




# Sony Notebook Computer User Guide

PCG-C1VE



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As an ENERGY STAR Partner, Sony has determined that this product meets the ENERGY STAR guidelines for energy efficiency.

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## *Safety Information*

### *Owner's Record*

The model number and serial number are located on the bottom of your Sony notebook computer. Record the serial number in the space provided here. Refer to the model and serial number when you call VAIO-Link.

Serial number: \_\_\_\_\_

Model number:

**PCG-141C**



**WARNING**

- Opening the unit, for whatever reason, could lead to damages that are not covered by the guarantee.
- To avoid electrical shock, do not open the cabinet. Refer servicing to qualified personnel only.
- Audio and picture distortion may occur if this equipment is positioned in close proximity to any equipment emitting electromagnetic radiation.
- To prevent fire or shock hazard, do not expose your VAIO notebook computer to rain or moisture.
- 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.
- Use your notebook only with the supplied AC adapter. To disconnect your notebook completely from mains voltage, unplug the AC adapter.
- Please make sure that the socket outlet is easily accessible.

## *Regulatory Information*

This product conforms to the following European Directives:

73/23/EEC (Low Voltage Directive)

89/336/EEC, 92/31/EEC (EMC Directives)

93/68/EEC (CE Marking Directive)

This product complies with EN 55022 Class B and EN 50082-1 for use in following areas: residential, commercial and light-industrial.

This product has been tested and found compliant with the limits set out in the EMC Directive for using connection cables shorter than 3 metres (9.8 feet)

- Disposal of Lithium ion batteries
- Dispose of properly at end-of-life.
- In some areas the disposal of lithium ion batteries in household or business waste may be prohibited.
- Please use the public collection system.

### *Disposal of Lithium Ion battery*

- Do not handle damaged or leaking Lithium ion batteries. Dispose of promptly and properly.
- 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 (see below).
- 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.
- Your notebook is equipped with an internal backup memory battery. For changing this battery, please contact VAIO-Link.

# Welcome

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

Here are just some of the features your VAIO notebook computer has to offer (read the details in the Specifications chapter of this guide).

- ❑ **Exceptional performance** - Your PC includes a fast processor.
- ❑ **Portability** - The rechargeable battery pack provides hours of use without AC power.
- ❑ **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.
- ❑ **Windows<sup>®</sup>** - Your system includes the latest operating system from Microsoft.
- ❑ **Communications** - Access popular online services, send and receive e-mails, browse the Internet...
- ❑ **Excellent customer support** - If you have any problem with your computer, you can contact VAIO-Link by Internet and e-mail (see your Customer Service Guide for addresses). Before contacting VAIO-Link, you may try to solve the problem by reading your User Guide (troubleshooting chapter) or the manuals and Help files for the peripherals or software.



## About the User Guides

Your Documentation Pack contains paper and online user guides on your computer's hard drive:

### Printed Documentation:

- ❑ A **Setting Up** poster in colour and a **Getting Started** brochure; a **Customer Guide**, where you will find all the basic information to start using your notebook computer;
- ❑ A complete **Regulatory and safety information poster**;
- ❑ Your **Sony Guarantee conditions**.

### Online Documentation:

#### 1 This User Guide:

- ❑ **Using Your Sony Notebook Computer** shows you how to use the standard components of your system.
- ❑ **Connecting Peripheral Devices** explains how you can add functionality by connecting various peripherals.
- ❑ **Getting Help** explains the support options available to you, and offers basic troubleshooting tips.
- ❑ **Notes on Use** provides facts and advice about using your notebook computer.
- ❑ **Specifications** provides details on your computer, drivers and accessories. The Compatibility Table indicates which devices are compatible with your notebook.

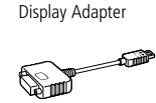
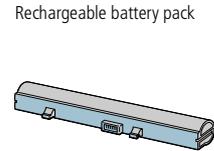
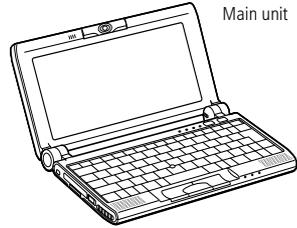
- 2 Refer to your **Software Guide** for information on the bundled software and the Sony applications.
-

- ❑ **About the Software** is a short description of the features of the software pre-installed on your system.
- ❑ **Using the Product Recovery CD-ROMs** explains how to perform a System and an Application Recovery.
- 3 Consult the **Online Help** files of the software you're using for detailed information on features and troubleshooting.
- 4 Refer to the Microsoft **Getting started** manual for more information on Windows®.



## Unpacking Your Notebook Computer

Remove the following hardware items from the box:



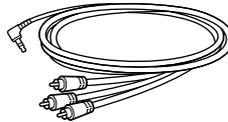
Product Recovery CD-ROMs



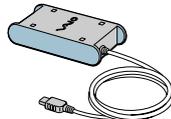
Documentation Pack



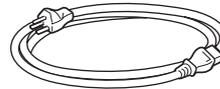
AV cable



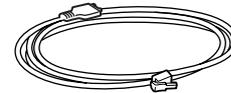
AC adapter



Power cord



Phone cable



PC card modem



Phone plug (country specific)

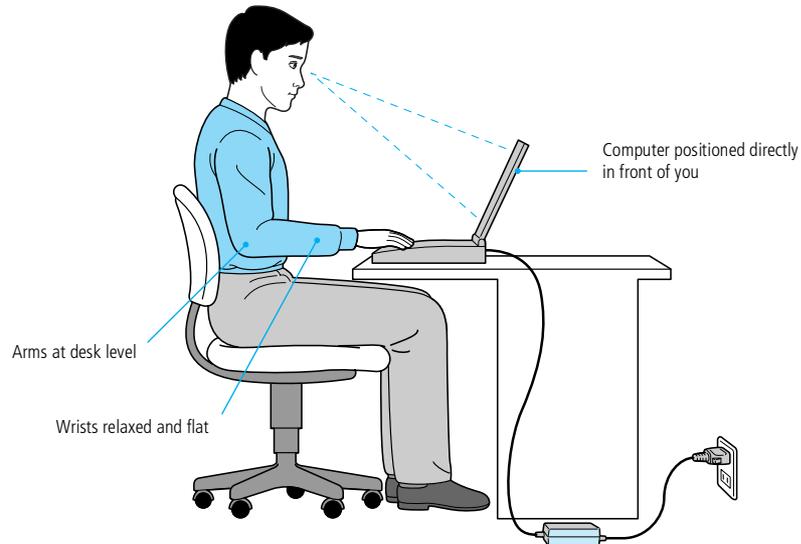


Spare stick covers



## Ergonomic Considerations

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



- ❑ **Position of your computer** – Place the computer directly in front of you as you work. Keep your forearms horizontal, with your wrists in a neutral, comfortable position while using the keyboard, touchpad, or external mouse. Let your upper arms hang naturally at your sides. Take breaks during sessions with your computer. Excessive use of the computer may strain muscles or tendons.

- ❑ **Furniture and posture** – Sit in a chair with good back support. Adjust the level of the chair so your feet are flat on the floor. A footrest may make you more comfortable. Sit in a relaxed, upright posture and avoid slouching forward or leaning far backwards.
- ❑ **Viewing angle of the computer's display** – Use the display's tilting feature to find the best position. You can reduce eye strain and muscle fatigue by adjusting the tilt of the display to the proper position. Adjust the brightness setting of the display as well.
- ❑ **Lighting** – Choose a location where windows and lights do not create glare and reflection on the display. Use indirect lighting to avoid bright spots on the display. You can also purchase accessories for your display that help reduce glare. Proper lighting adds to your comfort and work effectiveness.
- ❑ **Placement of an external display** – When using an external display, set the display at a comfortable viewing distance. Make sure the display screen is at eye level or slightly lower when you are sitting in front of the monitor.



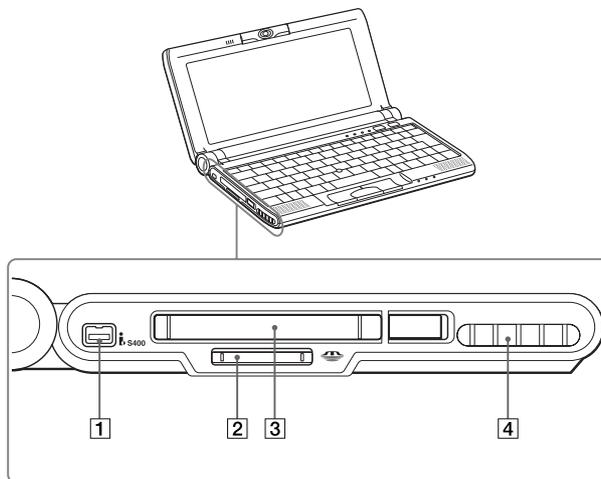
 There is a ventilation slot located near the PC card slot. Do not cover the ventilation slot when your computer is on.

## Using Your Notebook Computer

This section describes how to start using your computer and how to use your computer's internal and external devices, such as the pointing device and PC cards.

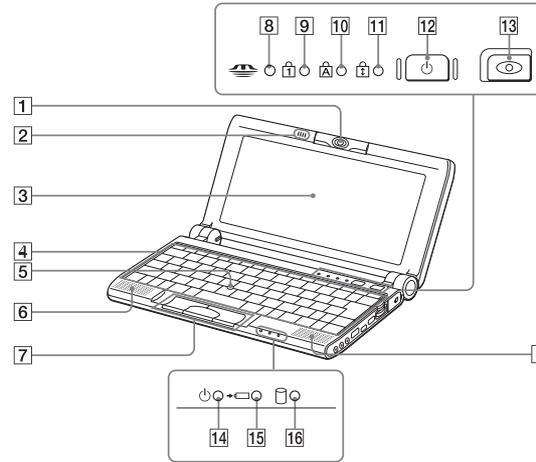
### Locating the Controls and Connectors

#### Left



- |          |                        |                           |          |                   |                           |
|----------|------------------------|---------------------------|----------|-------------------|---------------------------|
| <b>1</b> | S400 i.LINK™ connector | <a href="#">(page 60)</a> | <b>2</b> | Memory Stick slot | <a href="#">(page 37)</a> |
| <b>3</b> | PC card slot           | <a href="#">(page 43)</a> | <b>4</b> | Ventilation slot  |                           |

### Front



- |   |  |   |   |
|---|--|---|---|
| <b>1</b> Built-in Camera (Motion Eye) (page 40) | <b>6</b> Speaker (page 63)                       | <b>11</b> Scroll Lock indicator (page 26) | <b>16</b> Hard disk drive indicator (page 26) |
| <b>2</b> Microphone (page 64)                   | <b>7</b> Left / center / right buttons (page 32) | <b>12</b> Power button (page 23)          |   |
| <b>3</b> LCD screen                             | <b>8</b> Memory Stick indicator (page 37)        | <b>13</b> Capture button (page 40)        |   |
| <b>4</b> Keyboard (page 26)                     | <b>9</b> Num Lock indicator (page 26)            | <b>14</b> Power indicator (page 23)       |   |
| <b>5</b> Pointing device (page 32)              | <b>10</b> Caps Lock indicator (page 26)          | <b>15</b> Battery indicator (page 26)     |   |

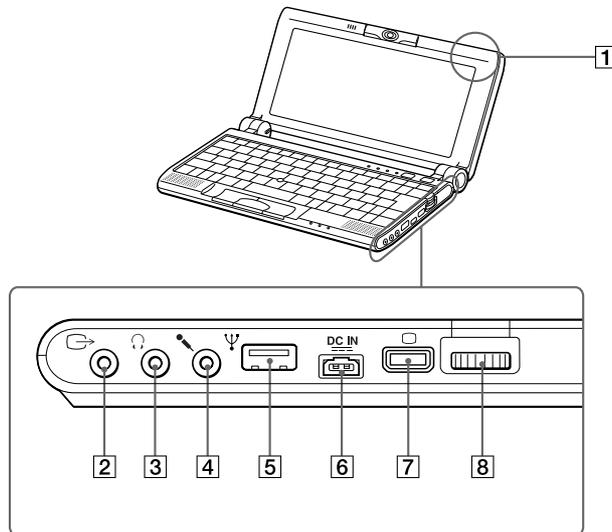


## Locating the Controls and Connectors

 AC adapter mains connector and power cord: hazardous voltage, according to EN 60950.

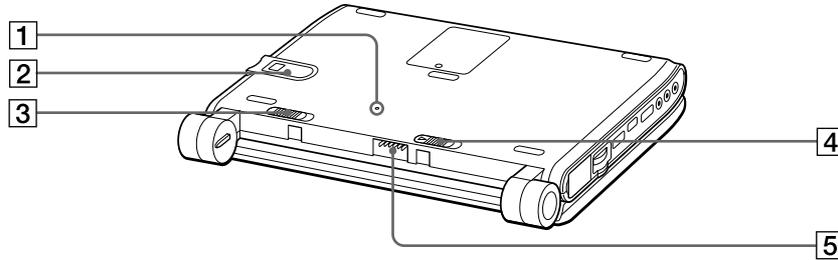
All other connectors for this notebook are SELV (Safety Extra Low Voltage), according to EN 60950.

### Right



- |   |   |                           |
|---|---|---------------------------|
| <b>1</b> ID Label   | <b>5</b>  USB connector | <a href="#">(page 65)</a> |
| <b>2</b> AV Out Connector   | <b>6</b>  DC In         | <a href="#">(page 18)</a> |
| <b>3</b>  Headphone connector  | <b>7</b> Mini VGA Out Connector   | <a href="#">(page 55)</a> |
| <b>4</b>  Microphone connector | <b>8</b> Jog Dial   | <a href="#">(page 34)</a> |

### Bottom



**1** Reset switch

**2** Memory Stick slot window [\(page 37\)](#)

**3** Battery lock lever [\(page 19\)](#)

**4** Battery release lever [\(page 19\)](#)

**5** Battery connector



 Use your notebook only with the supplied AC adapter.

To disconnect your notebook completely from mains voltage, unplug the AC adapter.

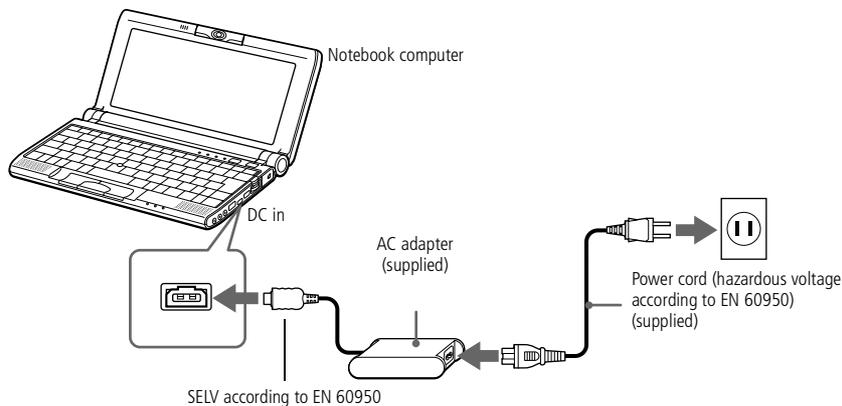
Please make sure that the socket outlet is easily accessible.

## Connecting a Power Source

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

### Using the AC Adapter

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



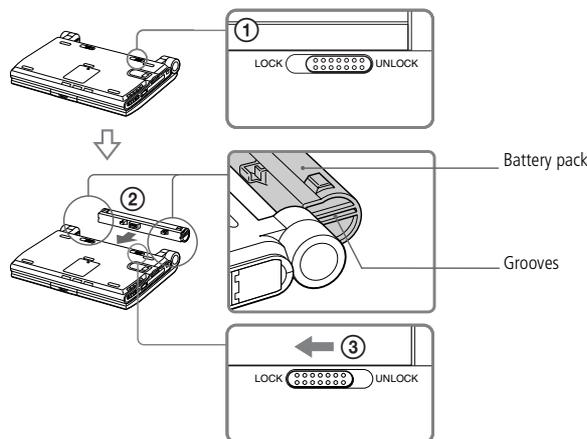
Make sure that the lid of your computer is closed before you insert/remove the battery pack.

## Using Battery Power

You can use a battery pack as a source of power. The PCGA-BP51A battery pack supplied with your computer is not fully charged at the time of purchase. Follow the steps below to insert and charge the battery pack.

### To insert the battery pack

- 1 Make sure that the Lock lever on the bottom of the computer is on the Release position.
- 2 Align the grooves on the battery with the tabs and notches on the back of the computer, and then slide the battery towards the computer until it clicks into place.
- 3 Slide the lock lever into the LOCK position to secure the battery on the computer.



*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% full, the battery indicator light turns off. This process takes approximately one to one and half hour. To charge the battery completely, continue charging for an additional hour.

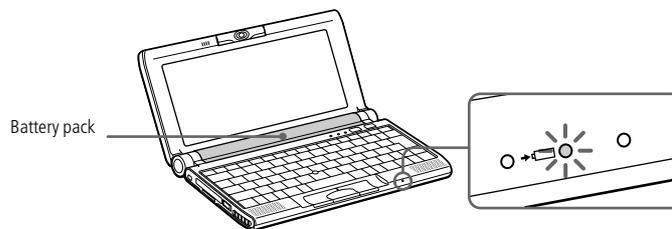
A fully charged battery pack provides power for hours.

The time varies based on your system configuration and the software you use. See your Software guide, in "Battery Information".

*Battery indicators*

The  battery indicator light indicates the status of the battery pack:

<i>Battery Indicator Light Status</i>	<i>Meaning</i>
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.



 When the battery is running out of power, both the battery and power indicators blink. To determine the time the battery lasts, please refer to **Battery information** in your Software Guide.

Keep the battery pack in the computer while it is directly connected to AC power. The battery pack continues to charge while you are using the computer.

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

You can extend battery life by changing the power management modes in the PowerPanel utility. See your Software guide, in **Controlling Power Management**.

The battery pack supplied with your computer is a lithium ion battery and can be recharged anytime. 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 the battery life is nearly depleted, the battery indicator starts flashing.

For some software applications and some peripheral devices, your computer may not enter system hibernation mode when 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 system suspend or system hibernation.

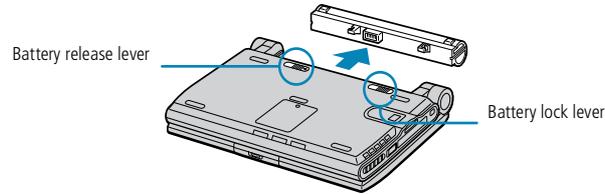
When the computer is connected to AC power and has a battery pack in the battery bay, it uses power from the AC outlet.

## Using Battery Power

! 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 system suspend mode.

### To remove the battery pack

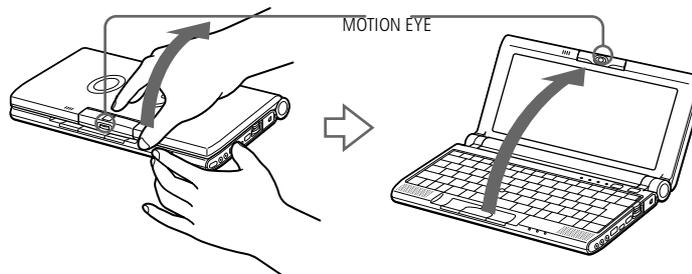
- 1 Turn off the computer.
- 2 Slide the release lever to the UNLOCK position and slide the battery away from the computer.



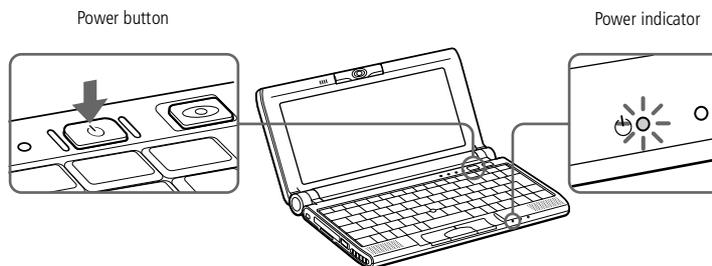
 If you press the power button for more than four seconds, the computer will turn off.

## Starting Your Computer

- 1 Open the cover.  
Hold the bottom of the computer firmly. Do not grab the camera lens when opening the cover, you may break the camera.



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



- 3 If necessary, adjust the brightness controls for the LCD display with Fn+F5. To increase the brightness, use the up or right arrow keys. To decrease use the down or left arrow keys.

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

✎ Respond to any prompts warning you to save documents.

Do not close the cover when the built-in camera is turned to the outside.

Do not turn the built-in camera while the cover is closed.

If you are unable to shut down your computer using the steps described above, press the **Ctrl+Alt+Delete** keys at the same time to restart the computer.

During a period of inactivity, you can conserve battery life by using **System Suspend** mode. See **Controlling Power Management** in your Software Guide for further details.

## Shutting Down Your Computer

### Using the Start Button of Windows

- 1 Click the **Start** button on the Windows® taskbar.
- 2 Click **Shut Down** at the bottom of the **Start** menu to display the **Shut Down Windows** dialog box.



- 3 Select **Shut down** if it is not already selected.
- 4 Click **OK**.
- 5 Wait for your computer to turn off automatically. The power indicator will turn off.
- 6 Turn off any peripheral connected to your computer.
- 7 To close your computer, make sure that the tabs on both sides of the display panel click into the grabs.

- ✎ You must connect your phone line before using any online services, including the online registration service.
- ✎ To access the online Registration web page, you must have a connection to the Internet.
- ✎ You need to plug in the PC Card Modem and the phone line to use the communication features described in this manual.

## Registering Your Computer

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

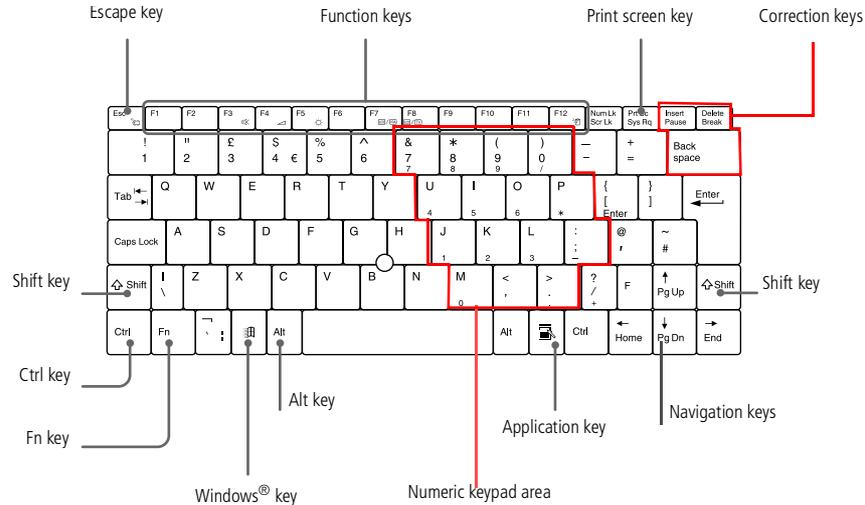
- ❑ **VAIO-Link** – You can contact VAIO-Link by Internet or e-mail (see your Customer Service Guide for addresses).
- ❑ **Guarantee** – Protect your investment. See the Guarantee sheet for the terms and conditions and please refer to your Customer Service Guide for more information.

Follow these steps to use the Sony Notebook Computer's online registration service:

- 1 Click on the **Welcome** button on your desktop,
- 2 Click **Next**,
- 3 Click **Internet**,
- 4 Fill in your Registration card fields,
- 5 Scroll down to the bottom of the form and click **Send**,
- 6 Click **OK**.

## Using the Keyboard

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



Keys	Descriptions
Numeric keypad area	Contains the keys found on a typical calculator. Use the numeric keypad area to type numbers or to perform mathematical calculations such as addition and subtraction. Note that you must press the <b>Num Lock</b> key to activate the numeric keypad. When you do so, the Num Lock light will illuminate.



<i>Keys</i>	<i>Descriptions</i>
Navigation keys	Several keys are devoted to moving the cursor on the screen.
Correction keys	The <b>Insert</b> , <b>Back Space</b> , and <b>Delete</b> keys enable you to make corrections in your documents.
Function keys	The twelve function keys along the top of the keyboard are used to perform designated tasks. For example, in many applications, <b>F1</b> is the <b>Help</b> key. The task associated with each function key may vary from one application to the next.
Escape key	The <b>Esc</b> (Escape) key is used to cancel commands.
Print Screen key	The <b>Print Screen</b> key takes an electronic snapshot of the screen and places it in the Windows Clipboard. You can then paste the screen shot into a document and print it.
Operator keys	Several keys are always used with at least one other key: <b>Ctrl</b> , <b>Alt</b> , and <b>Shift</b> . When held down with another key, the <b>Ctrl</b> (Control) and <b>Alt</b> (Alternate) keys offer another way to give commands. For example, in many applications, instead of choosing the <b>Save</b> command from a menu, you can hold down <b>Ctrl</b> and press <b>S</b> (referred to as Ctrl+S). The <b>Shift</b> key is used to produce capital letters or special symbols such as @ and \$.
Windows® key 	The key with the <b>Windows® logo</b> displays the Windows® Start menu; it is equivalent to clicking the Start button on the task bar. See <b>Combinations and functions with the Windows® key</b> for further details.
Fn key	The <b>Fn</b> key is used in combination with other keys to issue commands. See <b>Combinations and functions with the Fn key</b> .

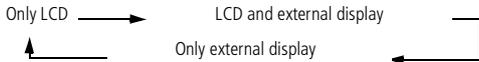
<i>Keys</i>	<i>Descriptions</i>
Applications key 	The <b>Applications</b> key displays a shortcut menu of context-sensitive choices; pressing this key is equivalent to clicking the <b>right mouse</b> button.

### *Combinations and Functions with the Windows® Key*

<i>Combinations</i>	<i>Functions</i>
 + F1	Displays Windows Help
 + Tab	Switches the selected button on the taskbar.
 + E	Displays Windows Explorer.
 + F	Displays the <b>Search Results</b> window to find a file or folder. This is equivalent to selecting <b>Search</b> and then <b>For Files or Folders</b> from the <b>Start</b> menu.
 + Ctrl + F	Displays the <b>Search Results - Computer</b> window where you can locate other computers.
 + M	Minimizes all displayed windows.
Shift +  + M	Returns all minimized windows to their previous size.
 + R	Displays the <b>Run</b> window. This is equivalent to selecting <b>Run</b> from the <b>Start</b> menu.

*Indicators*

<i>Indicator</i>	<i>Functions</i>	
Power 	Power on: lights green. System suspend mode: flashes amber.	
Battery 	Indicates the status of the battery inserted in the computer.	
Hard disk 	Lights when data is read from or written to the hard drive. Do not enter System Suspend mode or turn off the computer when this indicator light is on.	
<i>Light</i>	<i>On</i>	<i>Off</i>
 Memory Stick	Data is read from or written to the Memory Stick. Do not enter System Suspend mode or turn off the computer when this indicator light is on.	The Memory Stick is not being accessed.
 Num Lock	Turns on when the number keys area in the numeric keypad are active.	Turns off when the alphanumeric character keys in the keypad area are active.
 Caps Lock	Turns on when the letters appear in uppercase as you type. The Shift key lowers the case of typed letters when Caps Lock is on.	Turns off when letters appear in lower case as you type (unless if you hold down the Shift key).
 Scroll Lock	Turns on when the screen scrolls differently. (depends on the application. No effect in many applications.)	Turns off when information moves across the display normally.

<i>Combinations/Feature</i>	<i>Functions</i>
Fn+  (ESC)* System Suspend	Puts the system into System Suspend mode, a power management state. To return the system to the active state, press any key.
Fn+  (F3)* Speaker switch	Toggles the built-in speaker on and off.
Fn+  (F4) Speaker volume	Adjusts the built-in speakers' volume. To increase volume, press <b>Fn+F4</b> and then V or b To decrease volume, press <b>Fn+F4</b> and then v or B
Fn+  (F5) Brightness control	Adjusts the brightness of the LCD. To increase light intensity, press <b>Fn+F5</b> and then V or b To decrease light intensity, press <b>Fn+F5</b> and then v or B
Fn+  /  (F7)* Switch to the external display	Toggles between the LCD, external display (connected to the Monitor connector) and both LCD and external display. 
Fn+  /  (F8)* Switch to TV	Toggles between the LCD and both LCD and TV. Only LCD h LCD and TV.
Fn+  (F12)* System Hibernation	Provides for the lowest level of power consumption. When you execute this command, the states of the system and of the peripheral devices are written to the hard disk and the system power is turned off.

## Using the Keyboard

 \*You can carry out these functions using the Jog Dial. See **Information on Using the Jog Dial** in your Software Guide for more information.

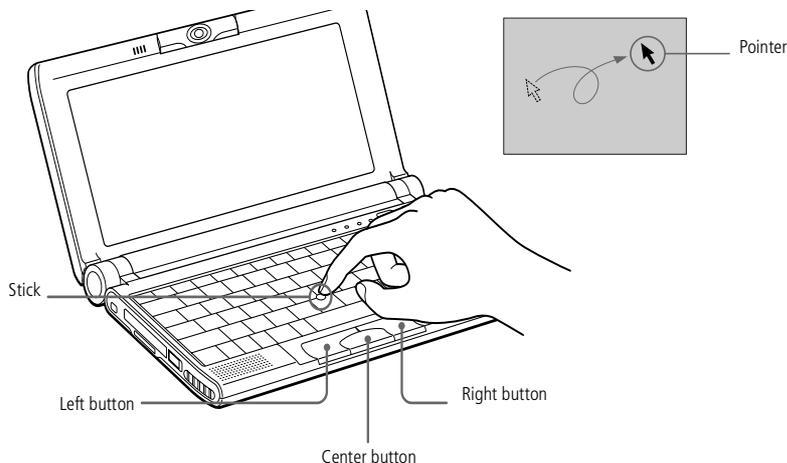
Some functions are not available until Windows launches.

<i>Combinations/Feature</i>	<i>Functions</i>
Fn+B* Bass Boost	Toggles the Bass Boost function off and on. This feature is available with headphones only.
Fn+D Video standby	Darkens the LCD in order to save power.

 The scroll function is available only with applications that support a scroll-pointing feature.

## Using the Pointing Device

The stick on the keyboard is a cursor-pointing device. You can point to, select, drag, and scroll objects on the screen using the stick.

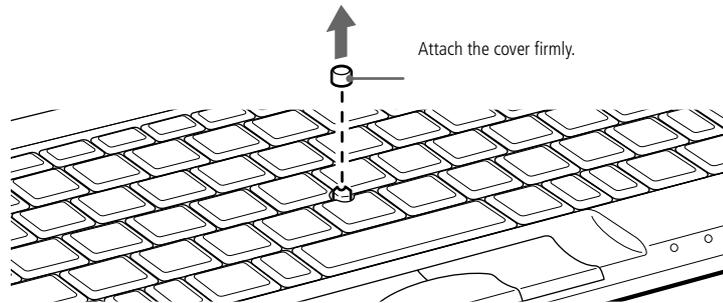


<i>Actions</i>	<i>Descriptions</i>
Point	Press the stick in the appropriate direction to position the pointer on the desired item or object.
Single-click	Press the left button once.
Double-click	Press the left button twice.
Right-click	Press the right button once. In many applications, this action displays a shortcut menu containing context-sensitive choices.

Drag	Press the stick in the appropriate direction to position the pointer on the desired item or object. While holding the left button, press the stick, then let it go at the desired point.
Scroll	Press the stick while pressing the center button.

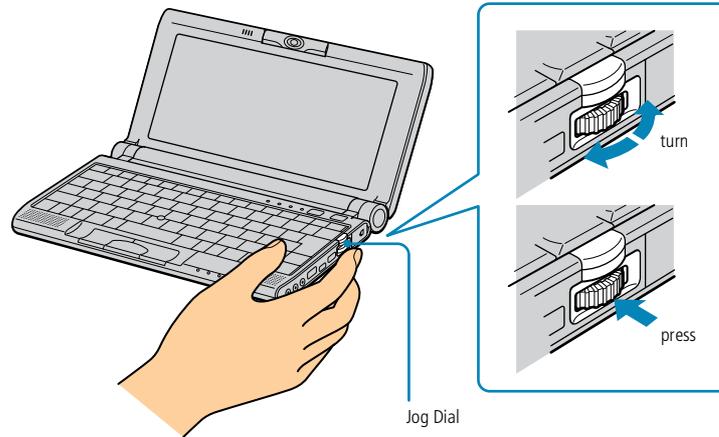
### *Replacing the Pointing Device cover*

You can take off the cover and replace it with the additional stick cover supplied with your computer.



### Using the Jog Dial™

Your computer is equipped with a Jog Dial on the right side of your computer. You can turn or / and press the Jog Dial to scroll the window, select a software, adjust the internal speaker volume, etc.



The Jog Dial window always appears in the display. The Jog Dial window is either in launcher mode or in guide mode.

✎ You can adjust the size of the Jog Dial window or close it. To display the **Jog Dial** window, double-click  or  on the task tray.

### Launcher mode

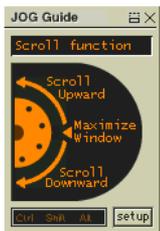
The Jog Dial window switches to the launcher mode if no software, program is in use, or when the Jog Dial window is active.



Jog Dial window in the launcher mode

### Guide mode

The Jog Dial is in the guide mode if a software or a program is in use and the window is active. Depending on the software, you can select an item from the selection list that is stratified by the List View mode, using the Jog Dial.



Jog Dial window in the guide mode

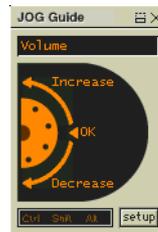
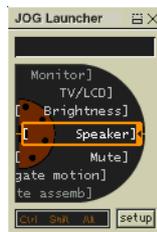
See your Software guide in **Information on Using the Jog Dial** for more information.

## To Use the Jog Dial

### Launcher mode

Click the **Jog Dial** window or the on-screen display, or press the Jog Dial while pressing the Ctrl key to switch to the launcher mode.

- 1 Turn the Jog Dial to select an item, then press the Jog Dial. The Jog Dial window switches to the guide mode, and shows the Jog Dial's function.



Jog Dial in the guide mode when "Speaker" is selected.

- 2 Turn or press the Jog Dial to use the Jog Dial's function.
- 3 To select another item, switch to the launcher mode and repeat from step 1.

! Hold the Memory Stick media with the arrow pointing in the correct direction and turn the label side down when you insert it into the slot. To avoid damaging the computer or the Memory Stick media, do not force the Memory Stick media into the slot if it does not insert smoothly.

🖱 You can enjoy still pictures and short movies in mpg format that you have recorded with your Digital still camera. For details, see your Software Guide.

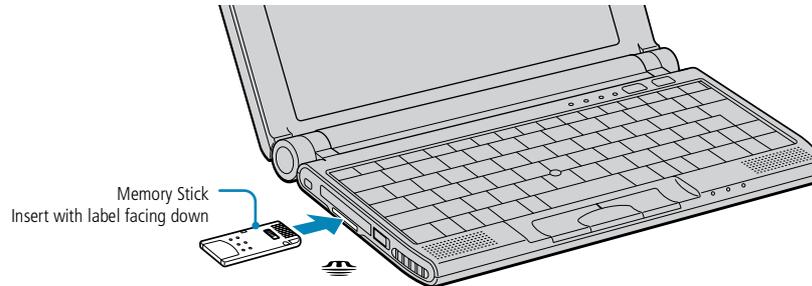
! If your computer is in Ultimate Battery Life mode, Memory Stick cannot be used. Select another mode. For details, see PowerPanel in your Software Guide.

## Using Memory Stick™

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

### To insert a Memory Stick™

Gently insert your Memory Stick, front label facing down, until it clicks into place.



When the Memory Stick™ is connected properly, you can see the contents of the card by clicking the Removable Disk (S:) icon.

If you cannot find the Removable Disk (S:) icon in My Computer on the desktop, proceed as follows:

- 1 Go to **Control Panel**, click **View all Control Panel options** if all options are not displayed.
- 2 Double-click on the **System** icon, then click on the **Device Manager** tab.
- 3 Click **Refresh**.

### *To remove a Memory Stick*

Make sure the access light is off. Push the Memory Stick™ in toward the computer. When it comes out, pull it out\*. The **Memory Stick** window closes automatically when you remove the Memory Stick™.



 \* Always remove your Memory Sticks gently, or they may pop out unexpectedly from the slot.

! To prevent the possible loss of data, do not remove a Memory Stick media when the Memory Stick media access light is on. Large image files require more time to store on a Memory Stick media, so always check the Memory Stick media access indicator and make sure that it is off before you remove the Memory Stick media.

 When the Memory Stick's™ erasure prevention switch is set to LOCK, data cannot be recorded or erased.

Before using Memory Sticks™, you should back up important data.

 To avoid damaging data:

Do not remove a Memory Stick™ or turn off the power while the access light is on.

Do not use Memory Sticks™ in locations that are subject to static electricity or electrical noise.

Do not touch the Memory Stick™ connector with your finger or metallic objects.

Do not attach labels other than the supplied label to a Memory Stick™.

Do not bend, drop, or apply strong shock to Memory Sticks™.

Do not disassemble or modify Memory Sticks™.

Do not allow Memory Sticks™ to get wet.

Do not use or store Memory Sticks™ in a location that is subject to:

- Extremely high temperatures, such as in a car parked in the sun

- Direct sunlight

- High humidity or places with corrosive substances

To prolong the life of Memory Sticks™, use the supplied storage case.

See the instructions that come with your Memory Stick™ for more information on use.

Do not touch the camera lens.

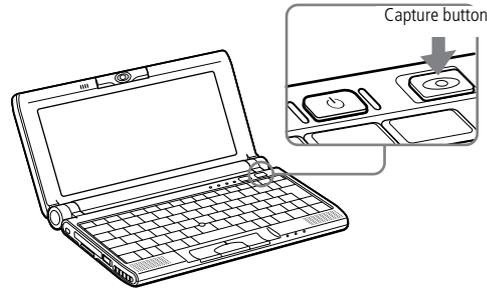
Do not point the camera towards the sun.

### Using the MOTION EYE built-in camera

Your computer includes a built-in MOTION EYE camera. You can use the camera to shoot still images and record video clips.

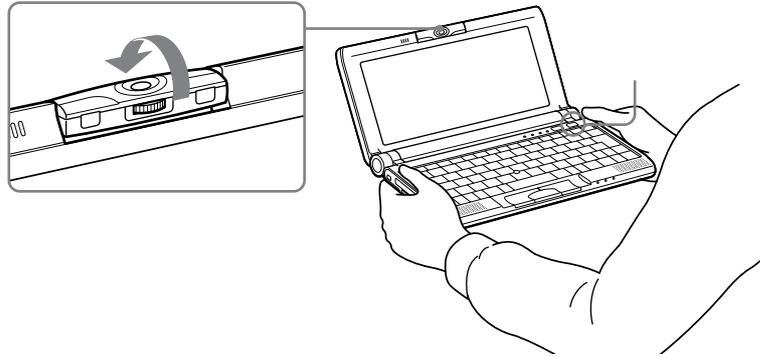
#### Capturing a still image

- 1 Press the **Capture** button. Smart Capture application starts.

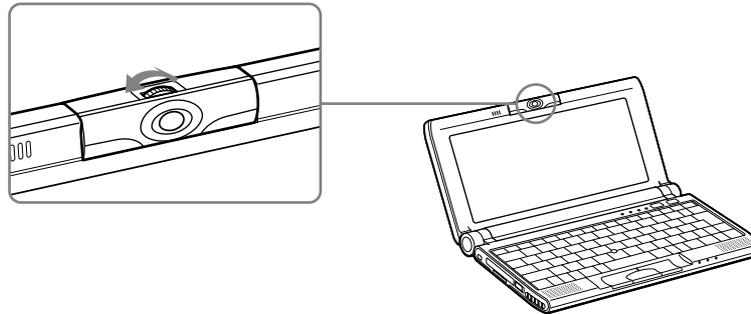


- 2 Select **Still Viewer/Movie Player** from the application list.
- 3 Choose **Still** by clicking the **Capture mode** button.

- 4 The **Finder** window appears. Turn the **Motion Eye** lens towards the subject.



- 5 Adjust the focus ring.



- 6 Half-press the **Capture** button on the computer. The image remains still. To display another image, release the **Capture** button and press again.



- 7 Fully press the **Capture** button. The **Still Viewer** window will open and the captured still image appears in the Still Viewer window.
- 8 For more detailed information about the capture software, please refer to your Software Guide.

 If you turn the lens inwards, Smart Capture goes into mirror mode. You can use the mirror mode to take a still image of yourself. A mirror-image appears in the finder window of the display while shooting, however, after capturing, a normal image appears.

You can capture the following still images sizes : 640 x 480, 320 x 240, 160 x 120 and 80 x 60.

You cannot detach the camera.

Smart Capture is not available while another software that uses the built-in camera is in use. Close this software before using Smart Capture.

You cannot transfer still images or video clips from the built-in camera while you are transferring files using i.LINK™ devices via the i.LINK™ cable.



## Using PC Cards

Your computer includes a PC card slot. PC cards allow you to connect portable external devices.

 Some PC cards may require you to disable idle devices when using the PC card. You can use Sony Notebook Setup to disable devices. Please refer to **Sony Notebook Setup** in your Software Guide for details.

Be sure to use the most recent software driver provided by the PC card manufacturer.

If an "!" mark appears on the **Device Manager** tab in the **System Properties** dialog, remove the software driver and then reinstall it.

You may not be able to use some PC cards or some functions within the PC card with this computer.

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

The PC card slot can accommodate one Type I or Type II PC card. This slot is compatible with 16 bits cards and card bus.

ZV (Zoomed Video) port is not available.

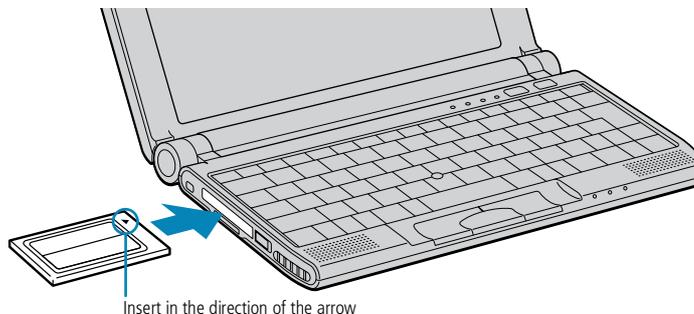
! Some devices may not function properly if you repeat Returning to Normal Mode from System Suspend Mode or System Hibernation mode.

! The computer will return to its original state if you restart it.



### To insert a PC card

Insert the PC card into the PC card slot, front label facing up. Gently push the card into the slot until the card is fixed into the connector. The **Release** button will then come out.



 Do not force a card into the slot. It may damage the connector pins. If you have difficulty inserting a card, check that you are inserting the card with the correct orientation. See the manual supplied with your PC card for more information on use.

For some PC cards, if you alternate between normal power operation and the system suspend or system hibernation power management modes while the card is inserted, you may find that a device connected to your system is not recognized. Reboot your system to correct the problem.

While the card is inserted, your computer may not enter the System Hibernation power management mode. It may enter the System Suspend mode. It is recommended to remove the card when your computer enters the System Hibernation mode by pressing Fn + F12 keys or by using the PowerPanel utility, and when it is set to enter the System Hibernation mode automatically while using a battery as the source of power.

✎ Close any applications that use the PC card before removing the card. Otherwise, data may be lost.

! Do not stop the USB Disk. If you remove the USB Disk, the internal Memory Stick slot will be disabled. If you removed the USB Disk by mistake instead of the PC card that you want to unplug, proceed as follows:

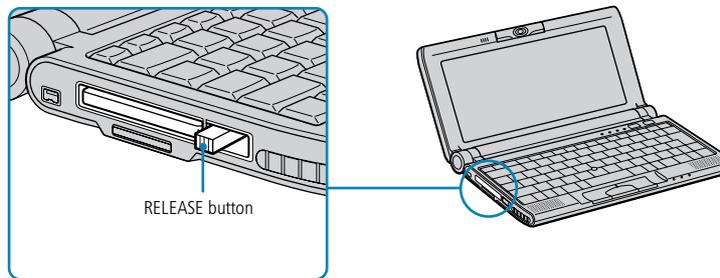
! In Control Panel, double-click the System icon. Select View all Control Panel options if all icons are not displayed

! Select the Device Manager tab and click Refresh.

### To remove a PC card

Follow the steps below to remove the PC card while your computer is on. If it is not removed properly, your system may crash and you may lose data that you did not save before. When your computer is off, skip steps 1 to 4.

- 1 Double-click the Unplug or Eject Hardware icon in the task tray.
- 2 Select the PC Card that you want to unplug and click **Stop**.
- 3 Click **OK** when the **You may safely remove this device** dialog box appears.
- 4 Press the PC card release button.
- 5 Gently grasp the card and pull it out.



 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.

## Using Power Saving Modes

When you use a battery as the source of power for your computer, you can take advantage of power management settings to conserve battery life. In addition to the normal operating mode, which allows you to turn off specific devices, your computer has two distinct power saving modes: System Suspend and System Hibernation.

When using battery power, you should be aware that the computer automatically enters System Hibernation mode when the remaining battery charge drops below 7 percent, regardless of the power management setting you select. See your Software Guide in **Controlling Power Management** for more information.

-  If you press the power button and hold for more than four seconds, the computer will switch off automatically.
-  When the computer is in **System Suspend** or **System Hibernation** mode, you cannot insert a disk.
-  When returning from System Hibernation mode, the system status stored on the hard disk is erased and the computer starts normally if you slide the power switch and hold for more than four seconds.

 When you activate System Hibernation mode, the screen remains black for a while and power is then turned off. Do not move the computer until the power indicator turns off.

### *Normal Mode*

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

### *System Suspend Mode*

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

#### *To activate System Suspend mode*

Press Fn+Esc, or press the power button quickly. You can also use the PowerPanel utility to enter System Suspend mode.

#### *To return to normal mode*

Press any key.

### *System Hibernation Mode*

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

#### *To activate System Hibernation mode*

Press Fn+F12. You can also use the PowerPanel utility to enter System Hibernation mode.

## Connecting peripheral devices

You can add functionality to your computer by connecting or using any of these peripherals and enjoy the software described in the **About the Software** user guide:

- ❑ PC card modem ([page 49](#))
- ❑ Floppy Disk Drive ([page 50](#))
- ❑ CD-ROM Drive ([page 53](#))
- ❑ Printer ([page 54](#))
- ❑ External Display ([page 55](#))
- ❑ i.LINK™ device ([page 60](#))
- ❑ External Speakers ([page 63](#))
- ❑ External Microphone ([page 64](#))
- ❑ Universal Serial Bus (USB) Device ([page 65](#))



Phone cable and connectors are TNV (Telecommunication Network Voltage), according to EN60950.

In order to register your Sony notebook computer, register your software online and use VAIO-Link, you must be connected to a phone line.

Your VAIO notebook computer is already configured to use the **COM One Platinum Card MC221 Discovery V.90** PC Card modem.

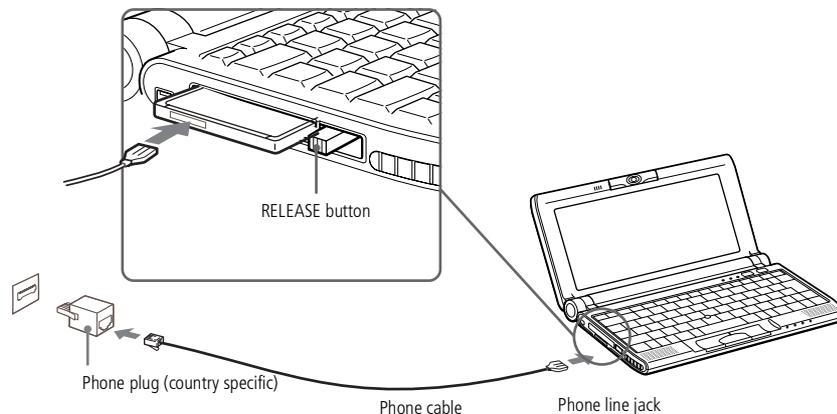
## PC card modem

Use your PC card modem to connect to a phone line and access the WWW.

### Connecting to a phone line

You need to connect a phone line to take advantage of online services, the Internet and to register your computer and software online.

- 1 Insert the PC card modem in the slot of the computer (label facing up), push it gently until the release button ejects completely. Put back the release button. Do not pull the cover too much, it may cause malfunction.



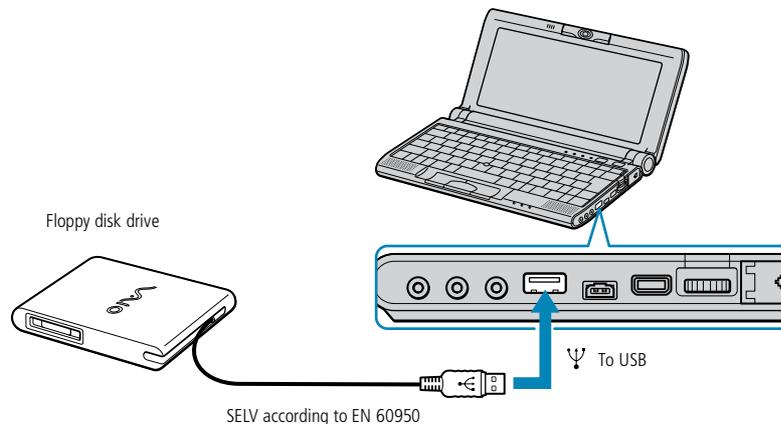
- 2 Plug the phone line jack into the connector on the PC card.
- 3 Plug the other end into the wall jack (using a phone plug if needed).

### Floppy Disk Drive

You can connect an optional floppy disk drive to the USB connector on your computer:

#### To connect the floppy disk drive

Plug the USB cable into the USB connector. The VAIO logo on the disk drive should be facing up.



## Floppy Disk Drive

⚠ Do not press the Eject button while the LED indicator is on. It may damage the diskette.

If the diskette does not come out by pressing the Eject button, disconnect the floppy disk drive from the computer.

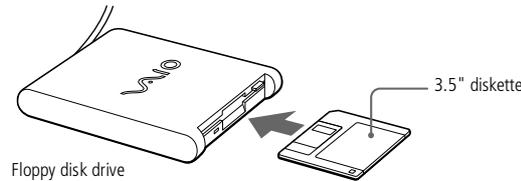
! Do not stop the USB Disk. If you remove the USB Disk, the internal Memory Stick slot will be disabled. If you removed the USB Disk by mistake instead of the USB Floppy, proceed as follows:

! In Control Panel, double-click the System icon. Select View all Control Panel options if all icons are not displayed

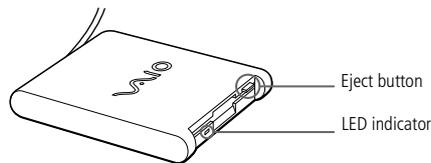
! Select the Device Manager tab and click Refresh.

*To insert a diskette*

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

*To remove a diskette*

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

*To remove the floppy disk drive*

Follow the steps below to remove the floppy disk drive while your computer is on. If it is not removed properly, your system may crash and you may lose data that you did not save before. Do not follow these instructions if your computer is turned off.

- 1 Double-click the **Unplug or Eject Hardware** icon on the task tray.
- 2 Click **USB Floppy** from the list and click **Stop**.

## Floppy Disk Drive

- 3 In the **Stop a Hardware device** dialog box, confirm the device that you want to stop.
- 4 Click **OK** when the **You may safely remove this device** dialog box appears.
- 5 Close the **Unplug or Eject Hardware** window.

You can now safely unplug the USB floppy disk drive.

*To carry the floppy disk drive*

Fold the floppy disk cable into the compartment on the side of the floppy disk drive.



## CD-ROM Drive

You can use an optional CD-ROM drive\* with your notebook computer to read CD-ROMs, Audio CDs, CD Extras and Video CDs.

 When the computer is in **System Suspend** or **System Hibernation** mode, you cannot insert a disk.

 The procedures for connecting the CD-ROM drive may vary, depending on the CD-ROM drive.

See the manual supplied with your CD-ROM drive for more information on use.

\* You can purchase the Sony PCGA-CD51/A CD-ROM drive as accessory. For more information, please contact your dealer.



- 🔧 Turn off your computer and the printer, unplug the AC adapter and the power cord before connecting the printer.
- 🔧 See the manual supplied with your printer for more information on installation and use.
- 🔧 Before using the printer, you may need to change the Printer setting in the Sony Notebook Setup software. Please refer to **Sony Notebook Setup** in the Software Guide for further details.
- 🔧 Before you connect peripherals, turn off the computer and all peripherals.
- 🔧 Connect the power cord only after connecting all cables.
- 🔧 Turn on the computer only after turning on all peripherals.

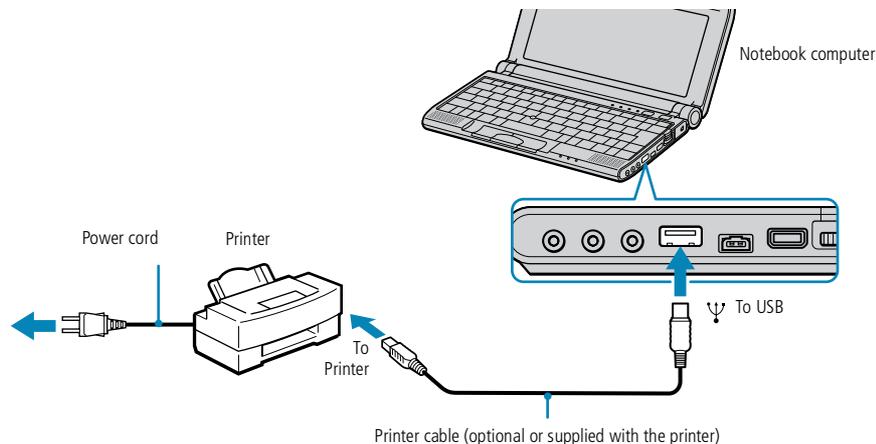
## Printer

You can connect a Windows-compatible printer to the USB connector of your computer to print documents.

To connect a printer using the USB connector

You can connect a USB printer compatible with your version of Windows<sup>®</sup> to your computer.

- ❑ Use the  symbol to locate the USB port on your computer and printer.
- ❑ Plug an optional USB printer cable into the USB connector.



### To use a printer

- ❑ Install the driver software supplied with your printer.

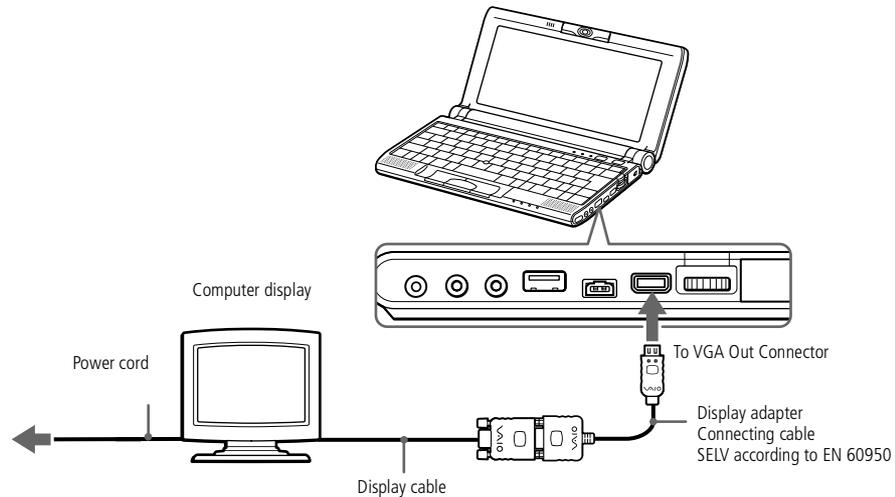
See the manual supplied with your computer display for more information on installation and use.

## External Display

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

- ❑ Computer display (monitor)
- ❑ Projector.
- ❑ TV

Use your external display as a second screen, or set up a virtual desktop (Please refer to “Using the Dual Display Function” in your Software Guide for further details).



*External Display*

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

You may not be able to display the computer's LCD and the external display together, depending on the types of computer display and projector used.

*To connect a computer display*

Use the supplied Display Adapter to connect your external display to the computer.

- 1 Plug the supplied Display Adapter into the computer's mini VGA Out connector and the display cable to the "VGA Out" connector of the Display Adapter.
- 2 If necessary, plug one end of the display power cord into the display, and the other end into an AC outlet.

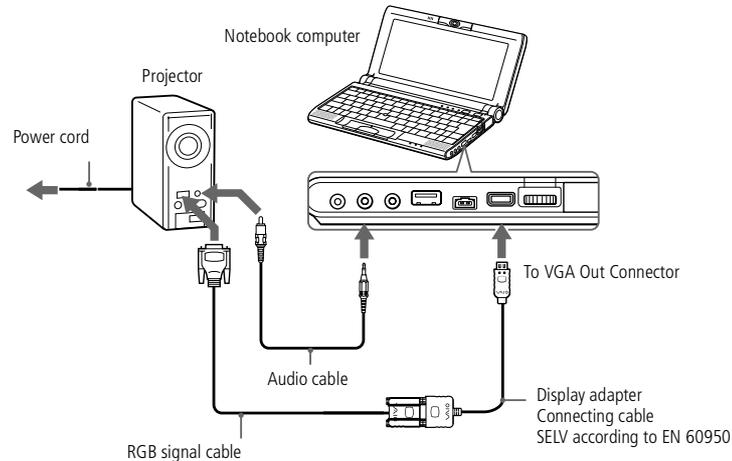


### To connect a projector

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

You can connect a projector using the supplied Display Adapter.

- 1 Plug the Display Adapter into the computer's mini VGA Out connector and the display signal cable to the "VGA Out" connector of the Display Adapter.
- 2 Use the  symbol to locate the Earphone connector. Plug the speaker audio cable into this connector.
- 3 Use the  symbol to locate the Microphone connector. Plug the microphone cable into this connector.



*External Display*

 \*You can carry out these functions using the Jog Dial. See **Information on Using the Jog Dial** in your Software Guide for more information.

*To select a display\**

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

See your Software Guide in **Selecting the Display Mode** for more information.

*To disconnect a display adapter*

Turn off the computer, then unplug the display adapter.

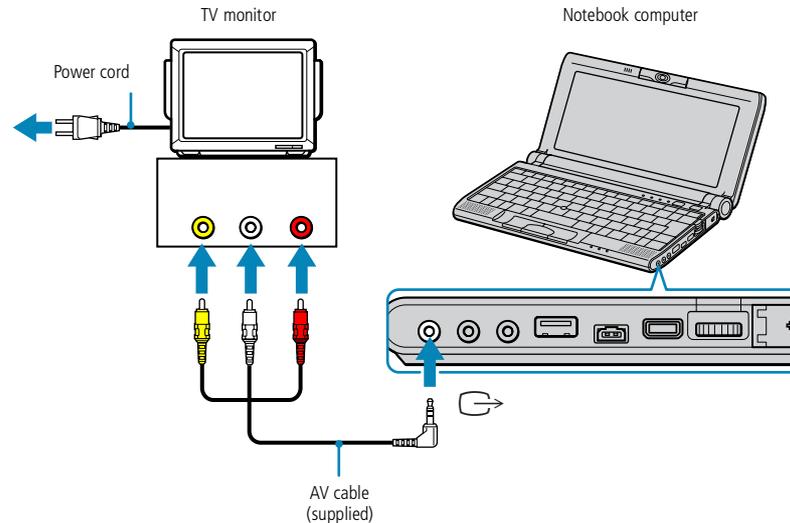
## External Display

✎ 640x480 dots of your computer screen will be displayed on TV. The rest can be seen by scrolling.

*To connect a TV*

Use the supplied AV cable to connect your TV monitor to the computer.

- 1 Plug the supplied AV cable into the computer's AV out connector.
- 2 Plug the three-pin jack of the AV cable to the TV as shown below.

*To select a TV display*

When you connect a TV to the monitor connector, you can press Fn+F8 to toggle the output between the Liquid Crystal Display (LCD), the TV, or both devices.

See your Software guide in "Selecting the Display Mode" for more information.

*i.LINK™ device*

 i.LINK™ cables compatible with your VAIO notebook include cables with the following part numbers: VMC-IL4415 (a 1.5 meter cable with a 4-pin connector at each end), VMC-IL4408Series (a 0.8 meter cable with a 4-pin connector at each end).

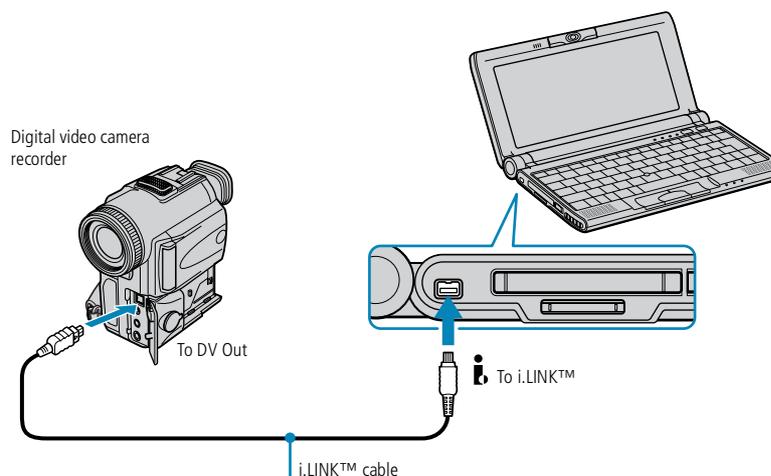
 You cannot import data from an i.LINK device if your computer is in Ultimate Battery Life mode. Select another mode. For details, see PowerPanel in your Software Guide.

*i.LINK™ device*

Your computer includes an i.LINK (IEEE1394) connector, which you can use to connect to an i.LINK™ device such as a digital video camera recorder or another computer.

*To connect a digital video camera recorder*

- 1 Plug one end of the i.LINK™ cable into the i.LINK™ connector of the computer and the other end into the DV Out connector on the digital video camera recorder.



- 2 Launch the DVgate application. Please refer to **DVgate** in your Software Guide for further details.

-  The Sony digital video camera recorder is taken as example; your digital video camera recorder may need to be connected differently.  
See the manual supplied with your digital video camera recorder for more information on installation and use.  
Do not connect more than one digital video camera at a time. The software supplied with your computer will not recognize multiple cameras.
-  The software limits the use of more than one digital video camera recorder or i.LINK™ device at the same time.
-  On Sony digital video cameras, connectors labeled "DV Out", "DV In/Out" or "i.LINK™" are i.LINK™-compatible.
-  The i.LINK™ connector of your notebook computer does not supply power to external devices generally powered by i.LINK™ connectors.
-  The i.LINK™ connector supports transfer rates up to 400 Mbps; however, the actual transfer rate depends on the transfer rate of the external device.
-  The i.LINK™ features available may vary depending on the software applications you use. Please refer to the documentation that came with your software for more information.

*i.LINK™ device*

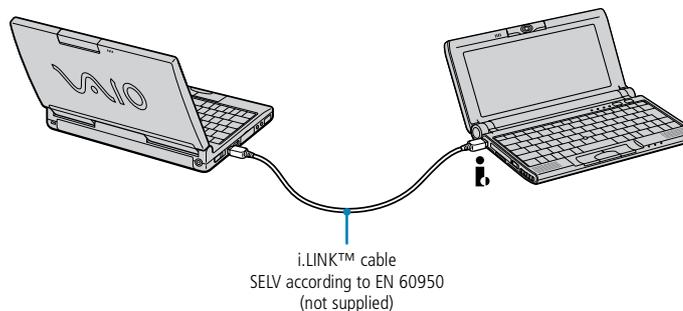
- ✎ If the VAIO computer that you want to connect to your VAIO computer has a version of Smart Connect that is not Smart Connect 3.0, you need to install Smart Connect for legacy in your Windows Me system. Smart Connect for legacy is provided with your Application Recovery CD-ROM.
- ✎ To check the Smart Connect version installed on your computer, consult the Smart Connect Online Help.
- ✎ To connect two computers with Windows Me and Smart Connect 3.0, use the Smart Connect 3.0 STD mode.

*To connect your computer to another VAIO computer*

You can connect your VAIO notebook to another VAIO computer using an i.LINK cable (optional). Your computer includes Windows Me and can be connected through i.LINK to any other VAIO computer that also has Windows Me installed or that has Smart Connect 3.0.

You can then use one computer to copy, edit or delete files from another VAIO computer.

You can also print a document on a printer connected to another VAIO computer.



✎ Make sure your speakers are designed for computer use.

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

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

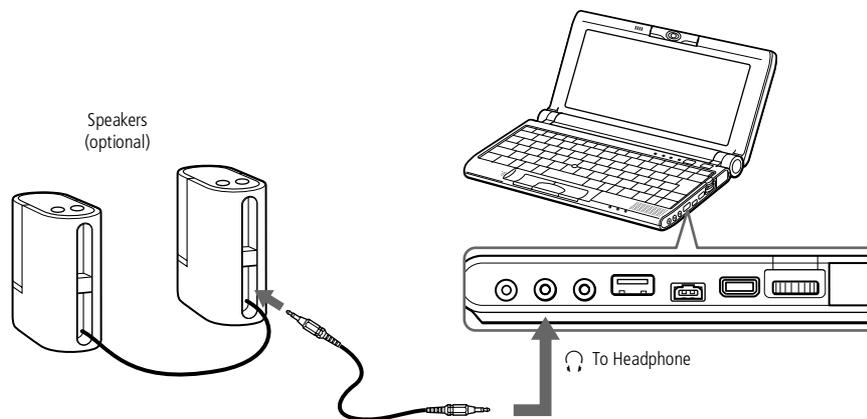
See the manual supplied with your speakers for more information on installation and use.

## External Speakers

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

### To connect external speakers

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



## External Microphone

✎ Make sure your microphone is designed for computer use.

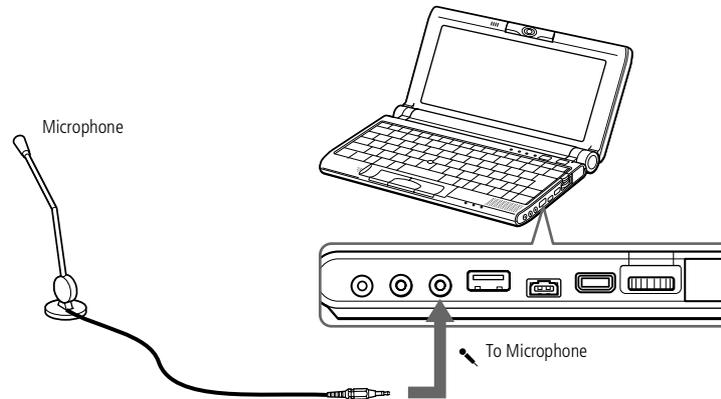
See the manual supplied with your microphone for more information on installation and use.

## External Microphone

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

### To connect an external microphone

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



 You may need to install software (device drivers) supplied with your USB device before using the USB device.

Read the manual supplied with your USB device carefully for more information on installation and use.

 You can connect the optional Sony USB mouse (PCGA-UMS1 series). As the driver for PCGA-UMS1 series is preinstalled on your computer, you can use this PCGA-UMS1 series USB mouse by just connecting it.

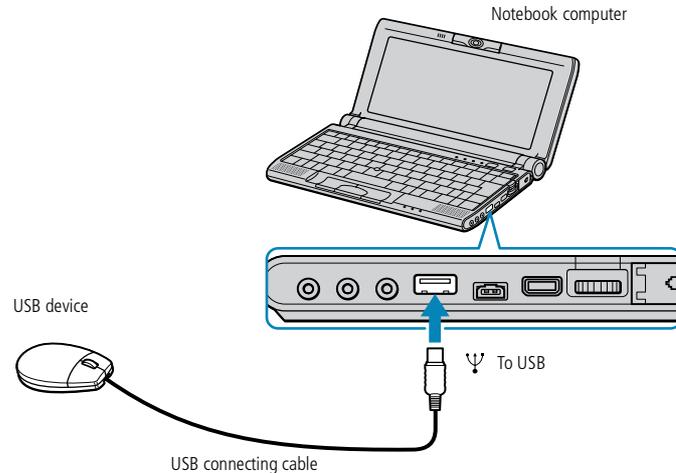
 Your computer doesn't include any Serial or PS/2 connectors.

## Universal Serial Bus (USB) Device

You can connect a USB device to your computer.

### To connect a USB device

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



## Getting Help

This section describes how to get help and support from Sony, as well as troubleshooting tips for your computer.

### About Sony's Support Options

Sony provides several support options for your computer. When you have questions about your computer and the pre-installed software, check these places for answers:

#### *Printed documentation supplied with your computer*

- ❑ The **Customer Guide** explains how to start your computer and use the basic functions. This guide gives you the information to access VAIO-Link.
- ❑ The **Setting Up Poster** gives you a list of the contents you find in the box, a summary of the bundled applications and the list of specifications of your computer and accessories.

#### *Online user guides supplied on your computer's hard drive*

- ❑ **This guide** explains how to use your computer, connect peripheral devices. It gives you a packing list and the list of specifications of your computer and accessories.
  - ❑ The **Software guide** lists the pre-installed software titles and explains how to use the utility programs and perform basic computer tasks.
  - ❑ The **Customer Service Guide** gives you complete information on the VAIO-Link Services.
-

 You need to plug the phone line into the modem to use the communication features described in this manual.

### *Other sources of information*

- ❑ The **online help files** that accompany your pre-installed software contain instructions on using the software.
- ❑ **VAIO-Link website:** if you have any problem with your computer, you can access the VAIO-Link web site (see your Customer Service Guide for the address).
- ❑ The **Sony e-mail support service** answers your questions by electronic mail. Just send your question in an e-mail message and a Customer Service Analyst will send you a reply with the answer. To send a question to Sony e-mail support, please refer to the instructions in your Customer Service Guide.
- ❑ **VAIO-Link Response Centre:** Before contacting VAIO-Link Response Centre, try to solve the problem by reading your User Guide (troubleshooting chapter) or the manuals and helpfiles for the peripherals or software (See your Customer Service Guide for the phone numbers).



 When you reconnect devices (other than USB devices), be sure to turn off the computer as described in **Shutting down your computer**. If you turn off the computer in other ways, it may result in data loss.

## 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 contact VAIO-Link.

- ❑ About the computer and software, see [page 69](#)
- ❑ About Digital Video Captures and DVgate, see [page 72](#)
- ❑ About the display, see [page 73](#)
- ❑ About the “MOTION EYE” Camera, see [page 74](#)
- ❑ About CD-ROMs and diskettes, see [page 75](#)
- ❑ About sound, see [page 76](#)
- ❑ About the modem, see [page 77](#)
- ❑ About peripherals, see [page 79](#)
- ❑ About Memory Stick, see [page 80](#)
- ❑ About Power Saving Modes, see [page 80](#)



## About the computer and software

### *My computer does not start*

- ❑ Check that the computer is plugged into a power source and that it is turned on.
- ❑ Check that the power indicator on the front panel of the computer indicates that the power is on.
- ❑ Check that the battery pack is inserted properly and that it is charged.
- ❑ Make sure there is no diskette in the floppy disk drive.
- ❑ Confirm that the power cord and all cables are connected firmly.
- ❑ If you have plugged the computer into an UPS, make sure the 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 you have switched to the external display and that the brightness and contrast controls are adjusted correctly. Please refer to the manual supplied with your display for details.
- ❑ Moisture condensation may have occurred. Do not use the computer for at least one hour and then turn it on.
- ❑ When the internal backup battery is low on power, it may not be able to start your system properly. Please plug your computer to AC power.
- ❑ The message **Press <F1> to resume, <F2> to setup** would appear at the bottom of the display. Should this happen, you need to initialize the BIOS.
- ❑ Follow the steps in 'When I turn on my computer, the **message Operating system not found** appears and Windows does not start'.

If any of the above procedures does not work, press the reset switch on the bottom of the computer with a wire and then restart the computer.

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

- ❑ Check the floppy disk drive to see if a non-bootable diskette is in the drive.
- ❑ If a non-bootable diskette is in the drive, eject it and press any key on your keyboard. Windows then starts normally.
- ❑ If Windows still does not start, follow the procedure below to initialize the BIOS.
- ❑ If the floppy disk drive is empty, follow the steps below to initialize the BIOS:
  - 1 Remove any peripheral devices connected to the computer,
  - 2 Turn the computer off and then turn it on again,
  - 3 Turn on the computer and press the **F2** key when the Sony logo appears. The BIOS setup menu screen appears.
  - 4 Press the arrow keys to select the **Exit** menu.
  - 5 Press the arrow keys to select **Get Default Values** and then press the **Enter** key. The message **Load default configuration now?** appears.
  - 6 Check that **[Yes]** is selected and then press the Enter key.
  - 7 Press the arrow keys to select **Exit (Save Changes)** and then press **Enter**. The message **Save configuration changes and exit now?** appears.
  - 8 Check that **[Yes]** is selected, then press the **Enter** key. The computer will restart.

*When I turn on my computer, the message " No system disk or disk error. Replace and press any key when ready" appears and the computer does not start.*

Remove the diskette from the floppy disk drive by pressing the Eject button and then press any key.

---

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

### *My computer does not shut down*

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

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

### *My computer "locks up"*

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

### *My software program locks up or crashes*

Contact the software publisher or designated provider for technical support. Please refer to your Software guide for information on how to contact them.

*The pointer in the display moves on its own*

A "drift" has occurred. However, this is not a malfunction. The pointer will stabilize if you do not touch the stick for a few seconds.

*My mouse does not work*

- ❑ If you are using an external mouse, check that the mouse is plugged into the mouse connector.
- ❑ If you have connected an external mouse while your computer is on, you must restart your computer.
- ❑ If you are using an optional Sony USB mouse, check that the mouse is plugged into the USB connector.

*The key top comes off*

Put it back where it was and press it until it clicks.

If you take off the key top intentionally or press it excessively when you replace it, it may cause a malfunction. Handle it with care.

See **Placing a key top** on [page 83](#)

*About Digital Video Captures and DVgate*

*While I'm recording images to a digital video device using DVgate, my system displays the message **Recording to DV device failed. Check the power and cable connections to the DV device and try the operation again...***

Close all open applications and restart your computer. Frequent recording of images to a digital video device while using DVgate sometimes causes this to occur. For more information on DVgate, see the DVgate online help.

---

*I cannot import any data to my computer with DVgate*

Make sure that you have not selected the Ultimate Battery Life power saving mode. If you are in Ultimate Battery Life mode, select another mode.

*About the display*

*The game images or video images are not clear*

Right-click the application bar of the PowerPanel software, choose "CPU speed settings", and take the check off the box "Auto ". Then set the speed control to 100%. See the on-line help of the PowerPanel software for details.

*My LCD does not display anything*

- Check that the computer is plugged into a power source and that it is turned on.
- Check that the power indicator on the front panel of the computer is on.
- Check that the battery packs are inserted properly and that they are charged.
- Adjust the brightness of the LCD.
- The computer may be in LCD (video) standby mode. Press any key to activate the display.

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

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

*The video image on my screen is too dark*

If an external display is connected to the Monitor connector, disconnect the display.



*The window I have just closed continues to appear on my LCD*

Press the Windows<sup>®</sup> key and the D key twice to refresh the screen.

### *About the "MOTION EYE" Camera*

*There is a vertical line when shooting a bright subject with a dark background using "MOTION EYE"*

This is a phenomenon called "smear." This is not a malfunction.

*The image in the view finder of "Smart Capture" is rough*

- ❑ If you are shooting a subject in rapid movement, there may be a gap. However, this is not a malfunction.

*The images captured with "MOTION EYE" are not clear*

- ❑ Shooting under fluorescent light may result in reflections.
- ❑ Red or green noises may occur if the captured images include dark parts.
- ❑ Check that the lens of the "MOTION EYE" is clean.
- ❑ Use the focus ring for focus adjustment.

*There are picture gaps and sound gaps when importing video images*

- ❑ Gaps may occur based on the effect settings in the Smart Capture software. See the on-line help of the Smart Capture software for details.

*The "MOTION EYE" does not show any images*

- ❑ Check that other software such as Smart Capture or CyberCode Finder don't use the "MOTION EYE".
-

- ❑ Depending on monitor mode, color palette, and other causes, the video memory is running out and the camera image is not displayed. Reduce the color palette or monitor resolution.
- ❑ Start Camera setting utility and select "Default".
- ❑ If the above countermeasures do not work, restart the computer.

### *About CD-ROMs and diskettes*

*The CD-ROM drive is not detected by the computer or does not run normally.*

- ❑ Check that the PC card you connect is the one supplied for using with your CD-ROM drive.
- ❑ Make sure the interface cable is connected to the PC card properly.
- ❑ Make sure the PC card is seated securely in the PC card slot in the computer.
- ❑ Check the PC card slot for bent or broken pins.
- ❑ The power of the CD-ROM drive is OFF.
- ❑ A pickup cover is installed in your drive. Remove the pickup cover before inserting a disc.

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

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

*My floppy disk drive cannot write to a diskette*

- ❑ The diskette is write-protected. Disable the write-protect feature or use a diskette that is not write-protected.
  - ❑ Check that the diskette is properly inserted into the floppy disk drive.
-

### About sound

#### *My speakers are not producing sound*

- ❑ The built-in speakers may be turned off. Press **Fn+F3** to turn on the speakers.
- ❑ The speaker volume may be turned to the minimum. Press **Fn+F4**, and then press **↑** or **→** to increase the volume.
- ❑ If nothing happens after having pressed **Fn+F3** or **Fn+F4**, double-click **System** in **Control Panel**. Open the **Device Manager** tab and make sure that the sound device is enabled.
- ❑ If your computer is powered by battery, check that the battery is inserted properly and that it is charged.
- ❑ If you are using an application that has its own volume control, check that the volume is turned up.
- ❑ Check the volume controls in Windows®.
- ❑ If you use external speakers, check that the speakers are properly connected and the volume is turned up. If the speakers have a mute button, make sure it is off. If batteries power the speakers, check that the batteries are inserted properly and that they are charged.
- ❑ If you have connected an audio cable to the Headphone connector, disconnect the cable.

#### *I can hear background noise when I play back music*

Try to use the Media Bar software instead of Windows Media Player.

#### *My microphone does not work*

If you are using an external microphone, check that the microphone is plugged into the Microphone connector.

*An error message appears when using voice-related software programs*

- ❑ Double-click **Yamaha DS-XG Audio Config** in **Control Panel**. Open the **Echo** tab and deselect the **Enable** check box. Click **OK**.
- ❑ If you are using several voice-related software programs at the same time, close them.

### *About the modem*

*My modem (PC card) doesn't work*

- ❑ Check that your PC card is properly inserted into your computer (label side facing up).
- ❑ Check that your PC card modem has been detected by the system.
- ❑ Check that the phone line is plugged into your PC card.
- ❑ Check that the phone line is working. You can check the line by plugging in an ordinary phone and listening for a dial tone.
- ❑ Check that the phone number the program is dialing is correct.
- ❑ Check that the communication software you are using is compatible with the PC card: make sure that the driver selected in your communication software matches your PC card programming (refer to your communication software user manual).
- ❑ Check that your PC card modem responds to AT-commands by doing a diagnostics test: Click **Start**, go to **Settings**, click on **Control Panel**, then select **Modems** and click the **Diagnostics** tab. Select the COM One Platinum Card Discovery V90 modem and press **More Info**.

### *My modem connection is slow*

Many factors influence modem connection speed, including telephone line noise or compatibility with telephone equipment (such as fax machines or other modems). If you think your modem is not connecting properly to other PC-based modems, fax machines, or your Internet Service Provider, check the following:

- ❑ Have your phone company check that your phone line is free from any line noise.
- ❑ If your problem is fax-related, check that there are no problems with the fax machine you are calling and that it is compatible with fax modems.
- ❑ If you are having a problem connecting with your Internet Service Provider, check that the ISP is not experiencing technical problems.
- ❑ If you have a second phone line available, try connecting the modem to that line.

### *My Modem Cannot Establish a Connection*

The modem dialing mode may be incompatible with your telephone line.

Check the dialing mode:

- 1 Open **My Computer**,
- 2 Open the **Control Panel**,
- 3 Click **View all Control Panel options** if all options are not displayed
- 4 Open **Modems**,
- 5 Select **COM One Platinum Card Discovery V.90**,
- 6 Choose **Dialing Properties**.

Modify the dialing property **Pulse dial** or **Tone dial** according to your telephone line.

---

## About peripherals

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

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

*The i.LINK device, which is connected to the computer, is not recognized, or a message appears.*

Disconnect the i.LINK™ device once, then connect it again.

*The two VAIO computers that I want to connect via the i.LINK device cannot communicate.*

- ❑ Your computer includes Windows Me. To be able to communicate with another VAIO computer, the other VAIO computer must have Windows Me or Smart Connect 3.0.
- ❑ If the version of Smart Connect on the other VAIO is not 3.0, you need to install Smart Connect for legacy in your Windows Me system. Smart Connect for legacy is provided with your Application Recovery CD-ROM.
- ❑ Check that your computer is not in Ultimate Battery Life mode. If this mode is selected, select another mode.

*My PC card is not working*

- ❑ Make sure the PC card is compatible with your version of Windows®.
  - ❑ Use the Sony Notebook Setup utility to disable devices you are not currently using.
-

### About Memory Stick

*My image file does not open, even though I insert a Memory Stick into the slot.*

VisualFlow is automatically started by default, if you insert a Memory Stick into the slot. If VisualFlow is active and the Memory Stick image files are not displayed, the Memory Stick format type might be different.

Copy the Memory Stick data to your hard disk and format your Memory Stick by means of the **Memory Stick Formatter** software which is installed on your machine.

*My Memory Stick does not work. I cannot access the S: Drive.*

- 1 Go to **Control Panel**, click **View all Control Panel options** if all options are not displayed.
- 2 Double-click on the System icon, then click on the **Device Manager** tab.
- 3 Click **Refresh**.

### About Power Saving Modes

*I cannot put my computer in any Standby mode (Hibernation or suspend): the system gets unstable.*

Quit all the applications you launched and restart the system. If you don't succeed, please refer to the question **My computer does not shut down**.

*My system cannot enter System Suspend mode*

If a disk drive is inserted into the PC card slot, close the card and remove it. See **To remove a PC Card** for details.

---

 By default, the standby and hibernation features are enabled.

*My system does not enter the power saving mode I selected*

Confirm your current notebook settings by proceeding as follows:

- 1 Click **Start**, then **Programs, Accessories, System Tools** and **System Information**. The **Help and Support** screen appears. If a disk drive is inserted into the PC card slot, close the card and remove it. **See To remove a PC Card** for details.
- 2 In the **Tools** menu, select **System Configuration Utility**.
- 3 Click **Advanced** in the **General** tab. The **Advanced Troubleshooting Settings** screen appears.
- 4 Make sure the **Standby feature is enabled** message is displayed. If the **Standby feature is disabled** message is displayed, click the **Enable** button.
- 5 Make sure the **Hibernation feature is enabled** message is displayed. If the **Hibernation feature is disabled** message is displayed, click the **Enable** button.
- 6 Click **OK** and restart your computer.

## Notes on Use

This section describes safety guidelines and precautions to help protect your computer from potential damage.

### *On Upgrading the System*

Your notebook computer and memory modules use high precision components and electronic connectors' technology. To avoid the invalidation of your Guarantee by mishandling, it is recommended that:

- ❑ You contact your dealer to install a new memory module,
- ❑ You do not install it yourself, if you are not familiar with upgrading memory on a notebook computer,
- ❑ You do not touch the connectors or open the memory panel.

Please call VAIO-Link if you need assistance.



## Placing a key top

 Do not take off the key top intentionally. It may cause a malfunction.

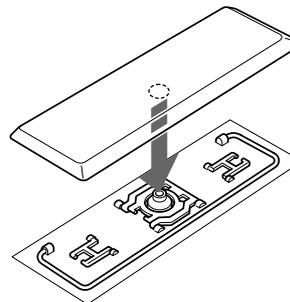
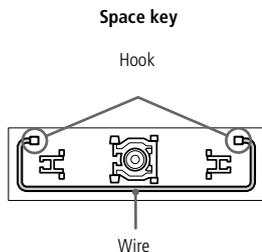
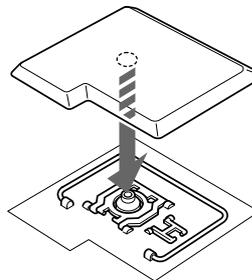
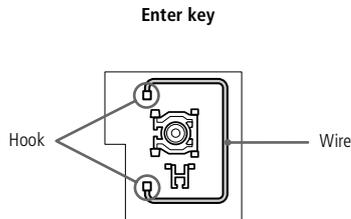
As it may damage the computer if you press it to excess, handle it with care.

## Placing a key top

If the enter key or the space key comes off, replace the key top as it is shown below. If the other key top comes off, put it where it was and push it until it clicks.

### To replace a key top

Take off the wire from key top, then catch on the hook. Align the center of the key top and press it from the top.



## Other precautions

### *On Handling the Hard Disk*

The hard disk has a high storage density and reads or writes data in a short time. On the other hand, it may be easily damaged by mechanical vibration, shock or dust. Keep the hard disk away from magnets.

Although the hard disk has the safety device in itself to prevent losing data due to mechanical vibration, shock or dust, you should be careful when handling your computer. To avoid damaging data:

- ❑ Do not give a shock to your computer.
- ❑ Do not place your computer in a location subject to mechanical vibration or in unstable situation.
- ❑ Do not move your computer while the power is on.
- ❑ Do not turn off the power or restart the computer while reading or writing data.
- ❑ Do not use your computer in a place subject to extreme change of temperature.
- ❑ If the hard disk is damaged, the data cannot be restored.

### *Back up data*

As you may lose important data once your computer is damaged, you should back up your data regularly.

Restore the original application programs from the Product Recovery CD-ROM. See the Windows® help for more information on back-up data.



*On Handling the LCD Screen*

- ❑ Do not leave the LCD facing the sun as it can damage the LCD. Be careful when using the computer near a window.
- ❑ Do not scratch the LCD or exert pressure on it. This could cause malfunction.
- ❑ Using the computer in low temperature conditions may produce a residual image on the screen. This is not a malfunction. When the computer returns to normal temperature, the screen returns to normal.
- ❑ A residual image may appear on the screen if the same image is displayed for a lengthy period of time. The residual image disappears in a while. 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 the Power Source*

- ❑ Your computer operates on 100V-240V AC 50/60 Hz.
  - ❑ Do not share the AC outlet with other power-consuming equipment, such as a copying 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.
-

*Other precautions*

- ❑ Unplug your computer from the wall outlet if you will not be using the computer for a long time.
- ❑ When the AC adapter is not used, unplug it from the AC outlet.
- ❑ Use only the AC adapter supplied. Do not use any other AC adapter.

*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 these may damage the finish of your computer.
- ❑ Should any solid object or liquid fall into the computer, shut down your computer and then unplug it. You may want to have the computer checked by qualified personnel before operating it any further.
- ❑ Do not drop the computer or place heavy objects on top of the computer.

*On Installation*

- ❑ Do not place your computer in a location subject to:
    - ❑ Heat sources, such as radiators or air ducts,
    - ❑ Direct sunlight,
    - ❑ Excessive dust,
    - ❑ Moisture or rain,
    - ❑ Mechanical vibration or shock,
    - ❑ Strong magnets or speakers that are not magnetically shielded,
    - ❑ Ambient temperature of more than 35° C or less than 10° C,
    - ❑ High humidity.
-

*Other precautions*

- ❑ 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 porous surfaces such as rugs or blankets, or near material such as curtains or draperies that may block its ventilation slots.
- ❑ The computer uses high-frequency radio signals and may cause interference to radio or TV reception. Should this occur, relocate the computer a suitable distance away from the set.
- ❑ Use only specified peripheral equipment and interface cables; otherwise, problems may result.
- ❑ Do not use cut or damaged connection cables.
- ❑ Your computer cannot be connected to a coin-operated telephone, and may not work with a private branch exchange (PBX).

*On Moisture Condensation*

If the computer is brought directly from a cold location to a warm one, moisture may condense inside your computer. In this case, allow at least an hour before turning on your computer. If any problem occurs, unplug your computer and contact VAIO-Link.

*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-ROM and DVD-ROM Disks*

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

#### *On Cleaning CD-ROM and DVD-ROM Disks*

- ❑ Fingerprints and dust on the surface of a disk may cause read errors. Proper care of the disk 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 disk.
- ❑ For normal cleaning, hold the disk by its edge and use a soft cloth to wipe the surface from the center out.
- ❑ If the disk is badly soiled, moisten a soft cloth with water, wring it out well, and use it to wipe the surface of the disk from the center out. Wipe off any remaining moisture with a dry soft cloth.

#### *On Using Batteries*

- ❑ Never leave the battery pack in temperatures above 60° C, such as in a car parked in the sun or under direct sunlight.
  - ❑ Battery life is shorter in a cold environment. This is due to decreased battery efficiency at low temperatures.
  - ❑ Charge the batteries at temperatures between 10° C to 30° C. Lower temperatures require a longer charging time.
  - ❑ While the battery is in use or being discharged, the battery pack heats up. This is normal and is not cause for concern.
  - ❑ Keep the battery pack away from all sources of heat.
  - ❑ Keep the battery pack dry.
  - ❑ Do not open or try to disassemble the battery pack.
  - ❑ Do not expose the battery pack to any mechanical shock.
  - ❑ If you are not using the computer for an extended period of time, remove the battery pack from the computer to prevent damage to the battery.
-

*Other precautions*

- ❑ 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.

*On Using earphones*

- ❑ **Road safety** – Do not use earphones while driving, cycling, or operating any motorized vehicle. It may create a traffic hazard and is illegal in some areas. It can also be potentially dangerous to play your earphones at high volume while walking, especially at pedestrian crossings. You should exercise extreme caution or discontinue use in potentially hazardous situations.
- ❑ **Preventing hearing damage** – Avoid using earphones at high volume. Hearing experts advise against continuous, loud and extended play. If you experience a ringing in your ears, reduce the volume or discontinue use.

*On Maintenance*

- ❑ Make sure to disconnect the power cord before cleaning the computer.
  - ❑ Avoid rubbing the LCD screen, as this can damage the screen. Use a soft, dry cloth to wipe the LCD screen.
  - ❑ Clean the computer with a soft cloth lightly moistened with a mild detergent solution. Do not use any type of abrasive pad, scouring powder or solvent such as alcohol or benzine.
-

# Specifications

<i>Model Number</i>	<i>PCG-C1VE</i>
<i>Processor</i>	Crusoe™ Processor TM5600 600 MHz
<i>Hard Disk Drive</i>	12.0 GB
<i>Standard RAM</i>	128 MB SDRAM (16 MB used in system)
<i>Maximum RAM</i>	192 MB (16 MB used in system)
<i>LCD Screen</i>	LCD 8.9" Ultra Wide XGA TFT
<i>L2 Cache Memory</i>	512 KB (CPU integration)
<i>MPEG</i>	MPEG 1 Digital Video Supports full-screen playback
<i>Graphics</i>	ATI Rage Graphics chip with 8 MB Video RAM and 3D accelerator
<i>Sound Capabilities</i>	16-bit CD-quality stereo sound
<i>Expansion Capabilities</i>	One PCMCIA type II Card and Card Bus support
<i>Built-In Capabilities</i>	Microphone, Stereo Speakers, MOTION EYE Camera, Pointing Device and Jog Dial.
<i>Special Buttons</i>	Jog Dial and Capture

<i>Model Number</i>	<i>PCG-C1VE</i>
<i>Connection Capabilities on Notebook</i>	VGA Monitor, Projector or Television, Memory Stick, External speakers or Headphone, Microphone, USB, Type II PC Cards, i.LINK™ (IEEE1394) S400
<i>Supplied Accessories</i>	Modem (+ plug), Rechargeable battery, AC Adapter, Power Cord, Display Adapter, Spare Stick Caps, AV cable.
<i>Service</i>	1 year free VAIO-Link Service †
<i>Guarantee</i>	1 year guarantee (parts and labour) †
<i>Power Requirement</i>	40 watts maximum (16 V DC / AC100-240V)
<i>Power Management</i>	Energy Star compliant ACPI (Advanced Configuration & Power Interface).
<i>Battery</i>	Lithium ion
<i>Dimensions</i>	
<i>Width</i>	248 mm
<i>Height</i>	27 mm
<i>Depth</i>	152 mm
<i>Weight with battery</i>	970 g
<i>Operating Temperature</i>	+5°C → +35°C (temperature gradient less than 10°C/hour)
<i>Storage Temperature</i>	-20°C → +60°C (Temperature gradient less than 10°C/hour)
<i>Operating Humidity</i>	20% → 80% (Not condensed), provided that humidity is less than 65% at +35°C (hygrometer reading of less than 29°C)

<i>Model Number</i>	<i>PCG-C1VE</i>
<i>Storage Humidity</i>	10% → 90% (Not condensed) provided that humidity is less than 20% at +60°C ( hygrometer reading of less than 35°C)
<i>MOTION EYE camera</i>	350,000 pixels (square pixels)
<i>Image device</i>	1/6 inch, progressive scan 350,000 pixels CCD
<i>Lens</i>	Focus distance: $f = 2.8$ mm, $F = 2.8$ ( $f = 39$ mm translated to a 35 mm camera)
<i>White balance</i>	Automatic / Indoor / Outdoor / Hold
<i>Shutter speed</i>	Auto / 1/50 / Hold
<i>Video Capture format / size</i>	YUY2 / 24 bit RGB Motion JPEG/JPEG / size: VGA hVGA qVGA
<i>Displayed frames</i>	30 frames/s. max (overlay)
<i>Captured frames</i>	30 frames/s. max. (320 x 240 motion JPEG) 15 frames/s max. (640 x 480 motion JPEG)

‡ See your registration card for conditions.

Specifications are subject to change without notice.

## Compatibility table

This table contains an overview of the devices that are compatible or not with your notebook.

<i>Devices</i>	<i>Compatible</i>	<i>Not compatible</i>
<i>USB</i>	Sony USB mouse PCGA-UMS1 Series	
<i>AC adapter</i>	PCGA-AC16V	
<i>i.LINK cables</i>	VMC-IL4415 VMC-IL4408Series	
<i>Floppy Disk Drive</i>	PCGA-UFD5	
<i>CD-ROM Drive</i>	PCGA-CD51Series	

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