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Welcome

Congratulations on your purchase of this Sony VAIO® computer, and welcome to the VAIO User Guide.

This User Guide provides detailed information on all aspects of using your new VAIO computer, from keyboard functions to preinstalled software applications.

In the left navigation window, click the topics you want to learn more about, and that information will be displayed in this main window.

Using Your VAIO Notebook

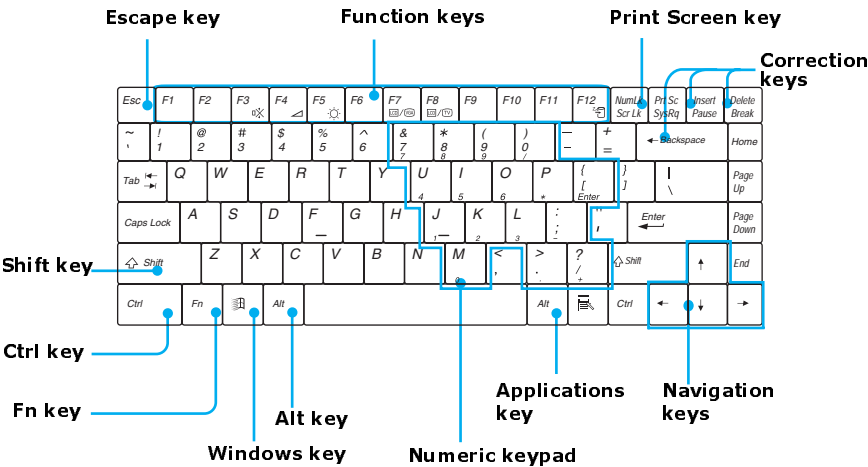
This section provides you with some essential information on the following topics.

- ☐ Using the Keyboard
- ☐ Using the Touchpad
- ☐ VAIO Action Setup
- ☐ Using the Center Jog Dial Control
- ☐ Using the Optical Disc Drive
- ☐ Using PC Cards
- ☐ Using a Second Battery Pack
- ☐ Using the Weight Saver
- ☐ Using Memory Stick Media
- ☐ Using Power Saving Modes
- ☐ Connecting a Phone Line
- ☐ Connecting to a Local Area Network
- ☐ Connecting to a Wireless LAN



Using the Keyboard

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











Keyboard








Key	Description
Numeric keypad	Contains the keys found on a typical calculator. Use the numeric keypad area to type numbers or to perform mathematical calculations such as addition and subtraction. Note that you must press the Num Lock key to activate the numeric keypad. (When you do so, the Num Lock light will be on.)
Navigation keys	Several keys are devoted to moving the cursor on the screen.
Correction keys	The Insert, Back Space, and Delete keys enable you to make corrections in your documents.

Key	Description
Function keys	The twelve function keys along the top of the keyboard are used to perform designated tasks. For example, in many applications, F1 is the Help key. The task associated with each function key may vary from one application to the next.
Escape key	The Esc (Escape) key is used to cancel commands.
Print Screen key	The Print Screen key takes an electronic snapshot of the screen and places it in the Windows Clipboard. You can then paste the screen shot into a document and print it.
Operator keys (Shift, Ctrl, Alt keys)	Several keys are always used with at least one other key: Ctrl, Alt, and Shift. When held down with another key, the Ctrl (Control) and Alt (Alternate) keys offer another way to give commands. For example, in many applications, instead of choosing the Save command from a menu, you can hold down Ctrl and press S (referred to as Ctrl+S). The Shift key operates the same way as on a typewriter; it is used to produce capital letters or special symbols such as @ and \$.
Windows key 	The key with the Windows logo displays the Windows Start menu; it is the equivalent of clicking the Start button on the taskbar. See “Combinations and functions with the Windows key” for more information.
Fn key	The Fn key is used in combination with other keys to issue commands. See “Combinations and functions with the Fn key” for more information.
Applications key 	The Applications key displays a shortcut menu of context-sensitive choices. Pressing this key is the equivalent of clicking the right mouse button.

Combinations and functions with the Windows key

<i>Combination</i>	<i>Function</i>
 + F1	Displays Windows Help.
 + Tab	Switches the selected button on the taskbar.
 + D	Displays the desktop.
 + E	Displays Windows Explorer.
 + F	Displays the Windows Find: All Files window to find a file or folder. This is the equivalent of selecting Find and then Files or Folders from the Start menu.
 + Ctrl + F	Displays the Windows Find: Computer window where you can locate other computers. This is the equivalent of selecting Find and then Computer from the Start menu.
 + M	Minimizes all displayed windows.
Shift +  + M	Returns all minimized windows to their previous size.
 + R	Displays the Run window. This is the equivalent of selecting Run from the Start menu.
Fn +  + Insert	Displays the Properties window. This is the equivalent of double-clicking the System icon in the Control Panel.

Indicators

Indicator	Function
Power 	Light is green when the power to the notebook is turned on, flashes amber in Standby mode, and turns off when the notebook is in Hibernate mode or powered off.
Battery 1 1 	Indicates the status of the battery inserted in the battery bay on the right side of the notebook.
Battery 2  2	Indicates the status of the battery inserted in the multipurpose drive bay on the left side of the notebook.
Memory Stick 	Indicates that the Memory Stick® slot is in use.
Hard disk 	This indicator will light when data is being read from or written to the hard disk. Do not enter Standby mode or turn off the notebook when this indicator is on.


Indicator lights

<i>Light</i>	<i>On</i>	<i>Off</i>
Num Lock	The number keys in the numeric keypad are active.	The alphanumeric character keys in the keypad area are active.
Caps Lock	The letters appear in uppercase as you type. The Shift key lowers the case of typed letters when Caps Lock is on.	Letters appear in lower case as you type, unless you hold down the Shift key.
Scroll Lock	The screen scrolls differently depending on the specific application. Many applications do not affect scrolling.	Information moves across the display normally.

Combinations and functions with the Fn key





Combinations/ Feature


Function





Fn+  (F3)
Mute On/Off



Toggles the built-in speaker off and on.


Fn+  (F4)
Speaker volume

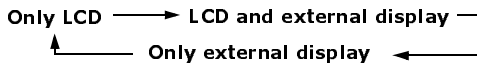
Adjusts the built-in speaker volume.
To increase volume, press Fn+F4, then  or .
To decrease volume, press Fn+F4, then  or .

Fn+  (F5)
Brightness control



Adjusts the brightness of the LCD.
To increase light intensity, press Fn+F5 and then  or .
To decrease light intensity, press Fn+F5 and then  or .

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

Toggles between the LCD, external display (when the unit is connected to the  VGA (Monitor) port), and both LCD and external display.



Connect the external display cable before you turn on the computer, otherwise the Fn+F7 combination will not work.

Fn+  only/
 (F8)
Control AV out


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



Connect the external display cable before you turn on the computer, otherwise the Fn+F8 key combination will not work. You cannot use the Fn + F8 function to switch between LCD and TV once a DVD is inserted into the optical drive.

***Combinations/
Feature***

Function

Fn+  (F12) Hibernate	Puts the system into Hibernate mode, a power saving mode. When you run this command, the state of the system and state of the peripheral devices are written to the hard disk and the system power is turned off. To return the system to its original state, use the power button.
Fn+Esc Standby	Puts the system into Standby mode, a power saving mode. To return the system to the active state, press any key or press the power button.
Fn+E	Ejects CD.
Fn+F	Display control. Minimizes and maximizes the LCD screen. If the default display resolution is reduced, this function maximizes the display resolution to fit the screen size. Maximizing the display screen enables you to view the display at a greater resolution.

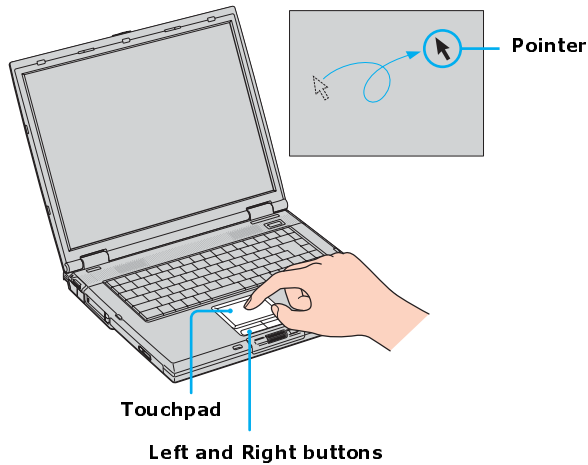


Some functions are not available until the Windows® operating system launches.

Using the Touchpad

The keyboard contains a touchpad that works like a mouse. You can use the touchpad to point to, select, drag, and scroll objects on the screen.

Touchpad



Action	Description
Point	Slide one finger on the touchpad to place the pointer on an item or object.
Click	Press the left button once.
Double-click	Press the left button twice.



Change text in this variable definition to document title.

Action	Description
Right-click	Press the right button once. In many applications, this action displays a shortcut menu of context-sensitive choices.
Drag	Slide one finger while pressing the left button.
Scroll	Move your finger along the right edge of the touchpad to scroll vertically. Move your finger along the bottom to scroll horizontally. (The scroll function is available only with applications that support a touchpad scroll feature.)



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

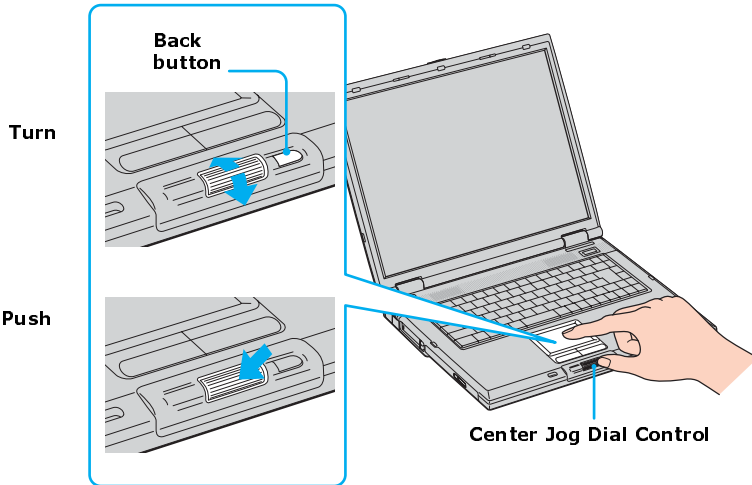
VAIO Action Setup

VAIO Action Setup manages the settings for your notebook's center Jog Dial™ control interface. An overview of some of the functions controlled by VAIO Action Setup is provided in this section. For more information on changing the settings using VAIO Action Setup, right-click the Jog Dial Utility icon  or  in the taskbar and click Help Topics.

Using the Center Jog Dial Control



Your notebook is equipped with a center Jog Dial control located below the left and right buttons. The center Jog Dial control enables you to open an application, folder, or document from a predefined list by rotating and pressing the center Jog Dial control. In addition, when you push the center Jog Dial control, you can turn on your notebook automatically and start the selected application or document.

Center Jog Dial Control



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

To use the center Jog Dial control

This section explains how to use the center Jog Dial control. For information on how to change the settings of the center Jog Dial control, right-click the Jog Dial Utility icon  or  in the task tray and click Help Topics.

To use the launcher mode

The center Jog Dial control window is in launcher mode until a software application is launched or the Jog Dial control window becomes active. When you select an item in the Jog Dial control window and it is displayed between orange bars, you can push the center Jog Dial control to view a submenu of that item.

To use the center Jog Dial control, click the Jog Dial control window or the Jog Dial Utility icon in the taskbar. Alternatively, you can press the Ctrl key and the center Jog Dial control while the Jog Dial control window is active to switch to launcher mode.

Jog Dial Launcher Mode



To select a desired item, proceed as follows:

Change text in this variable definition to document title.

- 1 Rotate the center Jog Dial control to select the item you want, then press the center Jog Dial control. The Jog Dial Launcher window switches to guide mode and shows the function of the center Jog Dial control.

Jog Dial Guide Mode



- 2 Rotate or push the center Jog Dial control to use the desired function.
- 3 To select another item, repeat steps 1 through 3 again.

To use the guide mode

The Jog Dial control window is in the guide mode when software is in use and the software window is active. Depending on the software you are using, you can select items from the displayed list using the center Jog Dial control. You can switch between guide mode and launcher mode by pushing the Ctrl key and the center Jog Dial control. The Jog Dial control window displays the function of the center Jog Dial control.

To use the center Jog Dial back button

The center Jog Dial control includes a back button located to the right of the control. Pushing this button brings you back to the previous screen.

To use the center Jog Dial control with software

If Sony software that supports the center Jog Dial control is active, you can use the functions of the center Jog Dial control that are allocated to that software. For more information on functions allocated to the software, see the online help file supplied with the software application.

If the software you are using is not Sony software and it supports the center Jog Dial control, you can still use the center Jog Dial control to scroll the window or adjust the window size.

Using the Dialog box

When a window such as Screen Properties is active, the Dialog box is displayed in the Jog Dial window. You can select an item in the window by rotating the center Jog Dial control. Pushing the center Jog Dial control is equivalent to pushing the Enter or Select key.

Jog Dial Guide Dialog Box



Using the Optical Disc Drive

Your notebook comes with a removable optical disc drive located in the multipurpose bay. Depending on the system you purchased, your optical disc drive is either a CD-RW/DVD Combo Drive or a DVD-ROM drive.



The optical disc drive is removable when the power is on, but do not remove the drive when your notebook is in a power saving mode. Any attempt to do so may result in malfunction and/or data loss.

To insert a disc

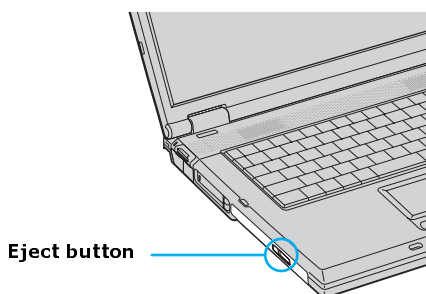
- 1 Turn on the notebook.



When the notebook is in Standby or Hibernate mode, you cannot insert a disc. See “Controlling Power Management” for more information on Standby and Hibernate modes.

- 2 Press the Eject button to open the optical drive. The tray slides out.

Ejecting the Tray

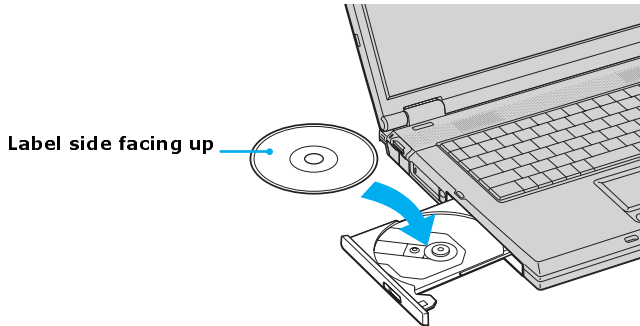


Avoid using adhesive labels to identify your discs. Adhesive labels may come off while the disc is in use in your optical drive, and may cause damage to the unit.

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

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

Inserting an Optical Disc



- 5 Close the tray by pushing it gently into the slot.

To eject a disc

When you finish using a disc, wait until the LED indicator turns off, and push the Eject button to remove the disc.

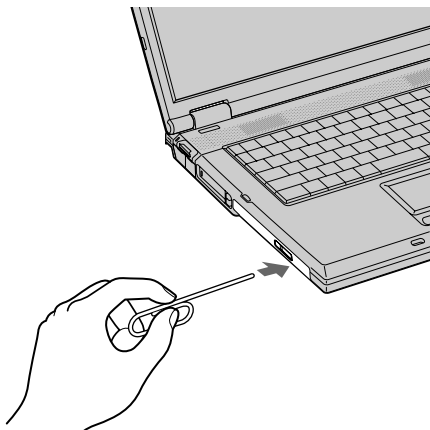
When the notebook is in a power saving mode, you cannot remove an optical disc. See “Controlling Power Management” for more information about power saving modes.

If the optical disc does not slide out when you push the Eject button, turn off the notebook and insert a thin, straight object (such as a paper clip) into the manual-eject hole.



Seat the disc firmly on the hub fingers. If the disc is not seated firmly, it could damage the optical drive and you may be unable to open the tray.

Manual Eject Hole



To play a DVD


To play a DVD, you may use the optical disc drive and the preinstalled WinDVD® software. For more information on WinDVD, see the help manual that came with your software.



Before you use the optical disc drive to play a DVD, close any open applications.

Systems equipped with a CD-RW/DVD Combo Drive can read DVD-R media, but systems equipped with a DVD-ROM drive cannot read DVD-R media. When you are ready to play a DVD, read the following suggestions on how to maximize your video viewing experience.

- ❑ When playing a DVD on battery power, set the power management profile to DVD. You can also set the power management profile to Automatic Profile Selection if the display is not clear when using other profiles.

 Automatic Profile Selection sets the power management profile to DVD whenever a DVD is inserted. See “Controlling Power Management” for more information.

- ❑ If you connect your notebook to a TV display, you may need to adjust the display resolution. Read the suggestions below to set the display resolution to the proper dimensions. Also see “Selecting the Display Mode” for more information.
- ❑ If the notebook is set to the default display setting, part of the video screen will not appear. To view the entire screen, adjust the display resolution to 640 x 480.



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

You cannot use the Fn+F8 key combination to switch between LCD and TV once a DVD is inserted into the optical drive.

Do not switch between LCD and the external display while the DVD is playing. This may cause a malfunction, and you may need to restart the DVD software.

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

Change the settings to disable the screen saver and the virus checker.

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

To play an audio CD

To play an audio CD, make sure the audio function is turned on. To do this, complete the following procedure.

 The optical disc drive must be installed in the multipurpose bay before you begin.

- 1 Click Start on the Windows taskbar, and select Settings, and click System. The System Properties window opens.
- 2 Select the Hardware tab and click Device Manager in the Device Manager box. A window listing your notebook hardware devices opens.
- 3 Double-click DVD/CD-ROM drives. From the drop-down list, double-click the drive name. A properties window appears.
- 4 Select the “Enable digital CD audio for this CD-ROM device” check box, if it is not already selected and then click OK.

Notes on CD and DVD discs

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

To write data to a CD-RW or CD-R disc *

You can use Drag’n Drop CD software to write data to a CD-R or CD-RW disc. To use Drag’n Drop CD software, see the instruction manual included with the software.

Notes on writing data to a CD-RW or CD-R disc


- ☐ For optimal writing speed, deactivate the screen saver and exit anti-virus software before writing data to a disc.
- ☐ For best results, use CD-Rs that are compatible with 8x speed.
- ☐ Your notebook does not support 1x writing speed.
- ☐ Do not strike or shake the notebook while writing data to a disc.

* For notebook models equipped with a CD-RW/DVD Combo Drive.

- ❑ Do not put your notebook into power saving mode while using Drag'n Drop CD software.
- ❑ Always use the AC adapter as the power source for your notebook if you are writing data to a CD-RW or CD-R disc. Using battery power may result in data transfer failure.
- ❑ Memory-resident disc utilities (such as the screen saver and virus checker) may cause unstable operating or data loss. Deactivate these utilities before writing data to a disc.

Using PC Cards

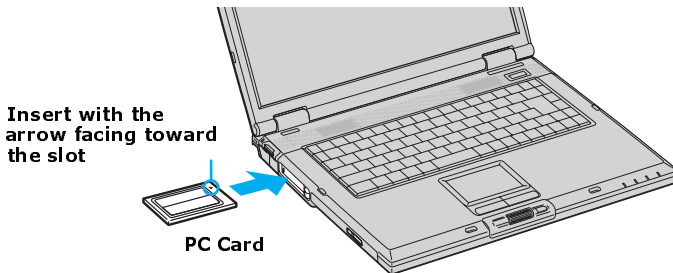
Your notebook includes two PC Card slots. PC Cards enable you to connect portable external devices, such as another hard disk drive, or a PC Network Interface Card (NIC) for network access.


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

To insert a PC Card

- 1 Insert the PC Card into the PC Card slot. Make sure the front label of the PC Card is facing up.

Inserting a PC Card



- 2 Push the PC Card gently into the slot. The PC Card is automatically detected by your system. The  Unplug or Eject Hardware icon appears in the taskbar.





Do not force a PC 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.

Do not carry your notebook while the head of the PC Card is out of the slot. Pressure or shock may damage the connector pins.


To remove a PC Card while the computer is on

 To remove the PC Card while the computer is off, skip to step number 6 below.

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

Notes on using PC Cards

- ❑ For some PC Cards, if you alternate between normal power operation and the Standby or Hibernate power management modes while the card is inserted, you may find that a device connected to your system is not recognized. Restart your computer to correct the problem.
- ❑ Some PC Cards may require that you disable idle devices when using the PC Card. You can use Sony Notebook Setup to disable devices. See “Displaying the Sony Notebook Setup Screen” for more information.
- ❑ Make sure you use the most recent software driver provided by the PC Card manufacturer.
- ❑ If an exclamation mark (!) appears on the Device Manager tab in the System Properties dialog box, remove the software driver and reinstall it.

 See the manual that came with your PC Card for more information on its use.

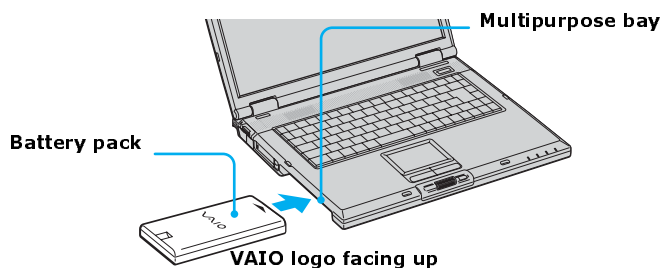
Using a Second Battery Pack

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

To insert a second battery pack

- 1 Remove the device in the multipurpose bay if one is installed.
- 2 Push the battery pack (with VAIO logo facing upward) into the multipurpose bay. If you are inserting a second battery pack, the second battery indicator switches on.

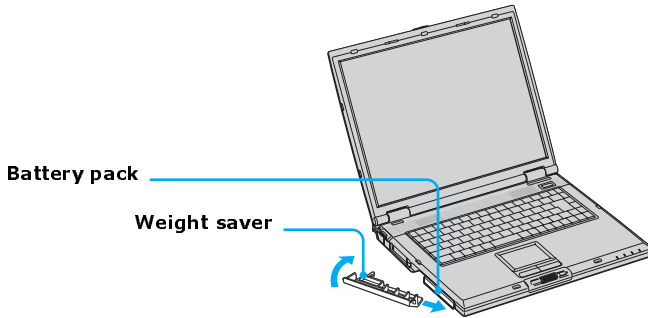
Second Battery in Multipurpose Bay



- 3 Attach the weight saver to the notebook to stabilize the battery pack. See “Using the Weight Saver” for more information.

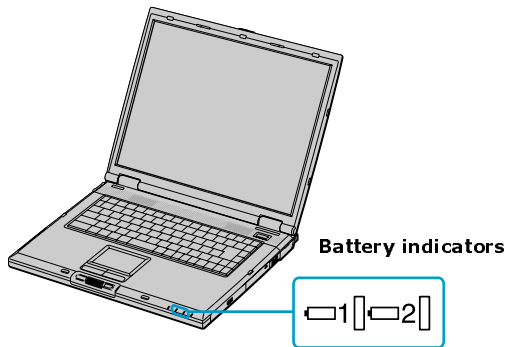
To charge the second battery pack


Using Weight Saver for Second Battery Cover



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

Charging the Second Battery



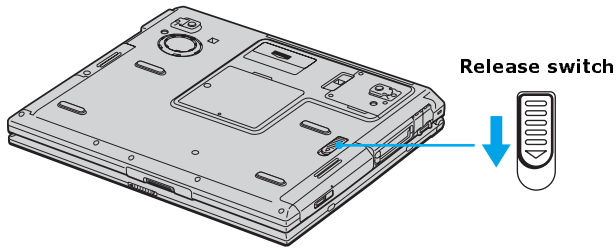
 To determine the amount of time the battery lasts, see “Displaying Battery Information” for details.

To remove the second battery pack

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

- 1 Slide the multipurpose bay release switch in the direction of the arrow to unlock the weight saver.

Multipurpose Bay Release Switch



- 2 Remove the weight saver, and pull out the battery pack.
- 3 Reinsert the weight saver. See "Using the Weight Saver" for more information.

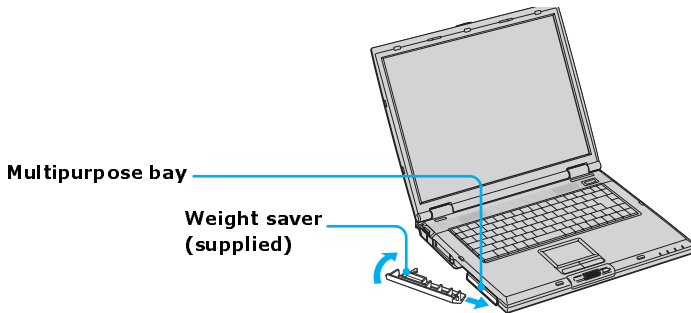
Using the Weight Saver

The weight saver protects the multipurpose bay when it is empty, and secures the second battery pack when it is installed in the multipurpose bay.

To attach the weight saver

- 1 Remove any device, such as a second battery pack, if one is installed in the multipurpose bay. See “To remove the second battery pack” for more information.
- 2 Slide the weight saver in the direction of the arrow until it clicks into place.

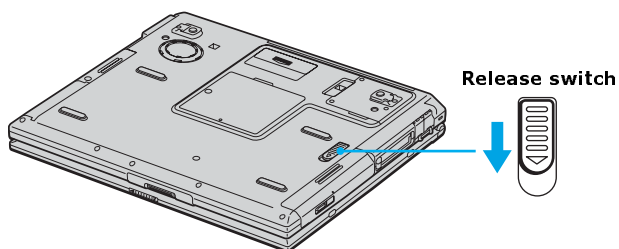
Inserting the Weight Saver



To remove the weight saver

- 1 To remove the weight saver, first slide the multipurpose bay release switch in the direction of the arrow.

Multipurpose Bay Release Switch





- 2 Remove the weight saver.

Using Memory Stick Media

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

Types of Memory Stick media

The following two types of Memory Stick media can be used with your notebook:

- ❑ MagicGate™  Memory Stick media (hereafter called MG Memory Stick media), which is provided with copyright protection
- ❑ Memory Stick  Memory Stick media, which does not have the same copyright protection as MagicGate Memory Stick media

Some music files with secure copyright protection may be stored on MG Memory Stick media but not on regular Memory Stick media. You can also use MagicGate media-compatible devices to record and playback music when they are connected to your notebook.

You can store mixed data on the Memory Stick media. For example, you can copy an ordinary file on a MG Memory Stick media that already contains music.

What is MagicGate Memory Stick media?

MagicGate Memory Stick media provides copyright protection that consists of authentication and encryption technology. Authentication technology ensures that protected content is only transferred between compliant devices and media. Protected content is recorded and transferred in an encrypted format to prevent unauthorized duplication or playback.

 MG Memory Stick media has the MG mark .

To insert Memory Stick media

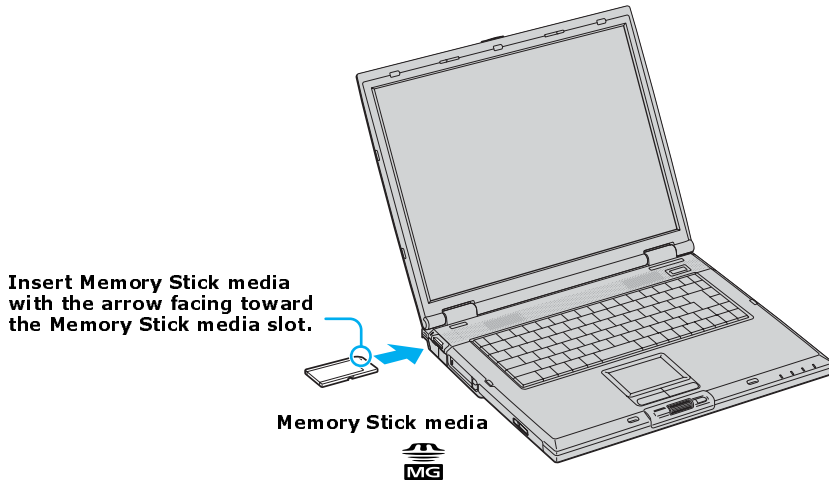
- 1 Insert the Memory Stick media with the arrow facing up and toward the Memory Stick media slot.

 Inserting the media in the wrong direction may damage the connector pins.

Change text in this variable definition to document title.

- 2 Slide the Memory Stick media carefully into the slot until it clicks in place.

Inserting Memory Stick Media



To view the contents of Memory Stick media

Click the Removable Disk (S:) icon under My Computer to see the contents of the Memory Stick media.

To remove Memory Stick media

- 1 Verify that the access light is off.
- 2 Push the Memory Stick media in toward the notebook.
- 3 When the Memory Stick media ejects, pull it out.



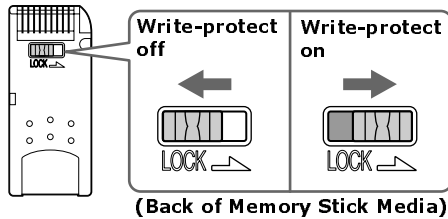
Be careful when removing the Memory Stick media. It may eject completely from the slot.

To write-protect Memory Stick media

Memory Stick media is designed with a write-protect tab to protect valuable data from accidental erasure or overwriting. Move the tab to the right or left to set or release write-protection.

Write-protect off	Data can be saved on the Memory Stick media.
Write-protect on	Data can be read from but not saved on the Memory Stick media.

Using the Write-protect tab



To format Memory Stick media

Memory Stick media is formatted for immediate use when you purchase it. If you need to reformat Memory Stick media, use the Memory Stick Formatter that is provided with the media. Follow the procedures included here. For more details about using Memory Stick Formatter, refer to Formatter Help.



Reformatting erases all current data that is stored on Memory Stick media. Before you reformat, confirm that the media does not contain files you want to keep.

- 1 Insert the Memory Stick media into the notebook. See “To insert Memory Stick media” for more information.
- 2 Click Start, and point to Programs, and click Memory Stick Utility Memory Stick Formatter.

3 Click Start Formatter. Memory Stick Formatter begins.

 Do not try to format the Memory Stick using the Windows formatting function.

Notes on Memory Stick media

- ☐ When the write-protect tab of the Memory Stick media is set to LOCK, data cannot be recorded or erased.
- ☐ Before using Memory Stick media, back up important data.
- ☐ Wait a minimum of 10 seconds after the Memory Stick media finishes reading or writing data before removing the media.
- ☐ If the media is removed prematurely, a blue screen with an error message appears, prompting you to continue or exit. Reinsert the media into the slot and press Enter to continue. This enables the media to finish reading or writing data.
- ☐ You can view video clips that you have recorded with Memory Stick media-compatible video camera recorders.
- ☐ The media slot can accommodate one Memory Stick media at a time.
- ☐ You may copy images from a digital video camera using Memory Stick media.
- ☐ Only MagicGate Memory Stick media can be used with copyright protected data such as music.
- ☐ Copyright protected music cannot be checked-out to any Memory Stick media other than MG Memory Stick media.
- ☐ Recorded music is limited to private use only. Using recorded music for any other purpose requires permission of the copyright holders.
- ☐ Sony is not responsible for music files that cannot be recorded from a CD or downloaded from other sources.

- ☐ Formatting Memory Stick media erases all data (including music data) previously saved to it. Before you format Memory Stick media, confirm that the media does not contain files you want to keep.



Do not use the media in locations that are subject to static electricity or electrical noise.

Do not touch the media connector with your finger or metallic objects.

Do not attach labels other than the supplied label to a media.

Do not bend, drop, or apply strong shock to the media.

Do not disassemble or modify the media.

Do not allow the media to get wet.

Do not use or store the media 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 the media, use the supplied storage case.



See the instructions that came with your media for more information on its use.

Using Power Saving Modes

When you use a battery as the source of power for your notebook, 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 notebook has two distinct power saving modes: Standby and Hibernate. When using battery power, be aware that the notebook automatically enters Hibernate mode when the remaining battery charge drops below 5 percent, regardless of the power management setting you select.

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

To use Normal mode

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

To use Standby mode

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

Activating Standby mode

To activate Standby mode, press Fn+Esc simultaneously. You can also click Start on the Windows taskbar, select Shut Down, and then use the drop-down arrow to choose Standby.

Returning to normal mode

Press any key to return to normal mode.

To use Hibernate mode

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

Activating Hibernate mode


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

 The “Save to Disk Manager” screen opens, and then the notebook enters Hibernate mode.

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

Returning to normal mode


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

 When returning from Hibernate mode, the system status stored on the hard disk is erased and the notebook starts normally if you press the power button and hold for more than 4 seconds.

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

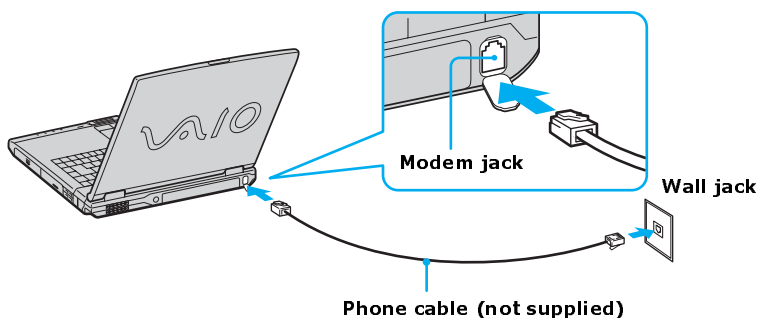
Connecting a Phone Line

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


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

- 1 Plug one end of the phone cable into the Ethernet port on the notebook's rear panel.

Connecting Phone Cable



- 2 Plug the opposite end of the phone cable into the wall jack.

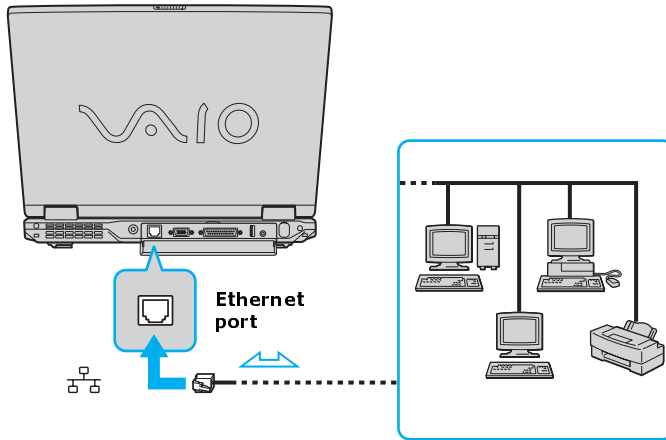
 Your notebook does not work with party lines, cannot be connected to a coin-operated telephone, and may not work with multiple phone lines or a private branch exchange (PBX). Some of these connections may result in excess electrical current and could cause a malfunction in the internal modem.


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

Connecting to a Local Area Network

You can connect your notebook to 10BASE-T and 100BASE-TX-type Local Area Networks (LANs). For the detailed settings and devices needed to connect to the network, ask your network administrator.

Connecting to LAN



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

To connect to the network

- 1 Right-click My Network Places and select Properties.
- 2 Click Advanced and select Network Identification to set the computer name, domain, workgroup, and DNS suffix. You can also use the Network Identification Wizard.

To set the connections, bindings, and provider order

- 1** Right-click My Network Places and select Properties.
- 2** Click Advanced and select Advanced Settings. This will give you access to Adapters and Protocol Bindings and Provider Order.

Connecting to a Wireless LAN

Your computer may come with a wireless Local Area Network (LAN) PC Card* that allows for wireless connections. With Sony's Wireless LAN functionality, all compatible digital devices can communicate freely without cable connections. A Wireless LAN is a network in which a mobile user can connect to a LAN through a wireless (radio) connection. You can opt to purchase a Wireless LAN Access Point to set up a LAN.

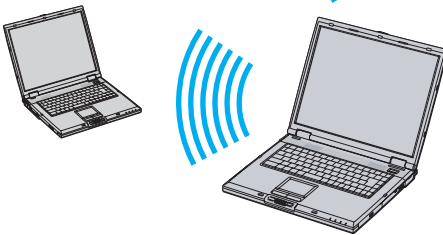
 See "Using PC Cards" for information on using the Wireless LAN PC Card.

Communicating via Wireless LAN

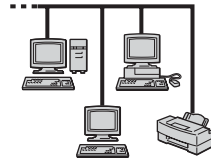
Access point connection (infrastructure)



Peer-to-peer connection (ad hoc)



Wireless LAN connection



The Wireless LAN Access Point

The Wireless LAN Access Point, which is also called the access point, is designed for building a Wireless LAN environment. If you purchase an access point, you can easily build a wireless LAN environment by plugging the access point into an AC power outlet and using the provided software with compatible devices. Because a wireless LAN configuration requires no wiring, you can operate multiple computers more freely than ever before.

* Supplied with selected models.

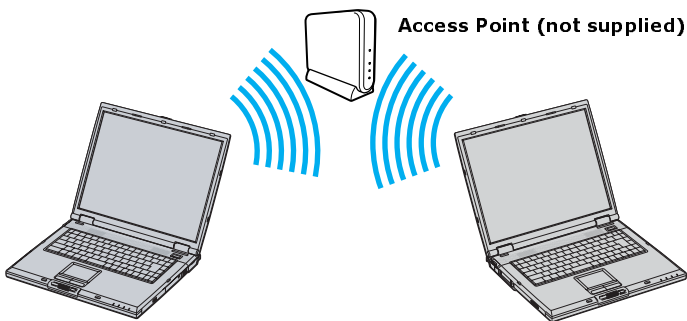
You can also connect an access point to a telephone line, Integrated Services Digital Network (ISDN) router, cable modem, or Digital Subscriber Line (DSL) modem to share access to the Internet among multiple computers.

 For information on available Sony products, go to:
<http://www.sonystyle.com/wirelesslan>.

Communicating with an Access Point (infrastructure)

An infrastructure network is one that extends an existing wired local network to wireless devices by providing an access point. The access point bridges the wireless and wired LAN and acts as a central controller for the Wireless LAN. The access point coordinates transmission and reception from multiple wireless devices within a specific range.

Communicating via Wireless LAN Access Point



To communicate with an access point

- 1 Turn on the notebook, and insert the wireless LAN PC Card into the PC Card slot on the left panel of the computer. Make sure you push the base of the antenna or sides of the card. Pushing the protruding part of the antenna could damage it.
- 2 Click Start, and point to Settings.
- 3 Point to Control Panel, and select Wireless Network. The Add/Edit Configuration Profile window opens.

- 4 Click Add. The Edit Configuration window opens.
- 5 Type a profile name, and make sure Access Point is selected under Network Type.
- 6 Click Next.
- 7 Click Scan to select a network, and then click Next.
- 8 Click Enable Data Security if the access point was set up with an encryption key, and select either alphanumeric characters or hexadecimal, depending on your encryption key.
- 9 Type your key in the first box, and make sure “Key 1” is selected near the bottom of the screen.
- 10 Click Next.
- 11 Select a power management option, and click Next.
- 12 Click the check box next to “Renew IP Address when selecting this profile.” to select it, and then click Finish.



The network key is data used to protect signals passing through a wireless LAN that conforms with IEEE 802.11b standard. It is also called an “encryption key.” Wireless LAN communication can only occur between an access point and computer that are using the same key information.

When you enter the network key and the connection is made, the access point is registered, and you do not have to enter the network key when you connect thereafter.

Checking your connection status

To confirm your connection status with an access point

- 1 Move the pointer over the ORiNOCO Radio connection icon on the right side of the Windows® taskbar. A pop-up message appears, stating your connection status, which is either Good, Marginal, or Out of range.
- 2 For more detailed information, click the ORiNOCO Radio connection icon. The ORiNOCO Client Manager window opens.
- 3 Click OK to close the window.

Communicating without an Access Point (peer-to-peer)

A peer-to-peer network is one in which a local network is created only by the wireless devices themselves, with no other central controller or access point. Each device communicates directly with other devices in the network. You can set up a peer-to-peer network easily at home.

To communicate without an access point

- 1** Turn on the notebook, and insert the wireless LAN PC Card into the PC Card slot on the left panel of the computer.
- 2** Click Start, and point to Settings.
- 3** Point to Control Panel, and select Wireless Network. The Add/Edit Configuration Profile window opens.
- 4** Click Add. The Edit Configuration window opens.
- 5** Type a profile name, and use the drop-down menu to select Peer-to-Peer Group under Network Type.
- 6** Click Next.
- 7** Create a network name, and use the drop-down menu to select a channel number.
- 8** Click Next.
- 9** If you want to set up an encryption key so only those who know the key can access the network, then click the check box next to Enable Data Security, select either alphanumeric characters or hexadecimal (depending on your encryption key), and type a five digit key.
- 10** Click Next.
- 11** Click the check box next to “Renew IP Address when selecting this profile.” to select it, and then click Finish.

Turning Off Wireless LAN

When you are not using the Wireless LAN network, remove the PC Card when the notebook is turned Off. Press the PC Card slot eject button, and hold both sides of the card to pull it out of the slot.



Removing the PC Card when the notebook is turned On can damage the system or the PC Card if done incorrectly.

To remove the wireless LAN PC Card when the notebook is turned on

- 1 Double-click the Unplug or Eject Hardware icon on the right side of the Windows® taskbar.
- 2 Select ORiNOCO Integrated Card in the Hardware devices list.
- 3 Click Stop. The “Stop a Hardware device” window opens.
- 4 Click OK.
- 5 When “...can now be safely removed from the system” appears, click OK.
- 6 Press the PC Card slot eject button.
- 7 Hold both sides of the card to pull it out of the slot.

Notes on using Wireless LAN

- ❑ Sony Wireless LAN devices support the IEEE 802.11b standard. Devices connecting to a Wireless LAN using the IEEE 802.11a standard cannot connect to devices using the IEEE 802.11b standard.
- ❑ Wireless LAN communication occurs on divided frequency bands known as channels. Third-party Wireless LAN Access Point channels may be preset to different channels from Sony devices.
- ❑ If using a Wireless LAN Access Point, refer to connectivity information contained in those instructions.

Connecting Peripheral Devices


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

- ☐ Connecting an External Floppy Disk Drive
- ☐ Connecting a Port Replicator
- ☐ Connecting a PS/2 External Mouse or Keyboard
- ☐ Connecting an Audio Device
- ☐ Connecting an Audio-Video Device
- ☐ Connecting a Parallel Port Printer
- ☐ Connecting a USB Printer
- ☐ Connecting an External Display
- ☐ Connecting a Universal Serial Bus Device
- ☐ Connecting an i.LINK Device
- ☐ Connecting with another VAIO computer
- ☐ Connecting External Speakers
- ☐ Connecting an External Microphone
- ☐ Expanding Your Notebook Capabilities

Connecting an External Floppy Disk Drive

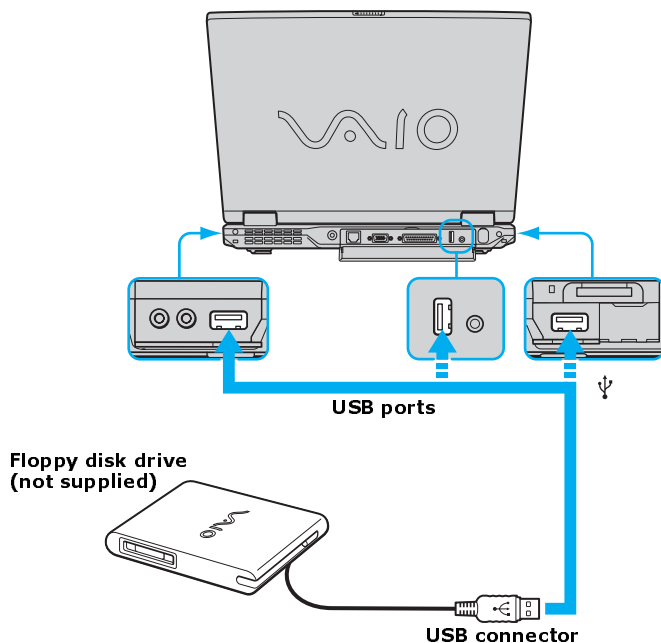
You can connect a Sony USB floppy disk drive (not supplied) to a Ψ USB port on your notebook. Your notebook has three USB ports: one located on the left panel, one located on the right panel, and one located on the rear panel.

To connect an external floppy disk drive

 You do not need to shut down your notebook before connecting or disconnecting a floppy disk drive.

Plug the USB connector into the Ψ USB port. The VAIO logo on the USB floppy disk drive should be facing upward.

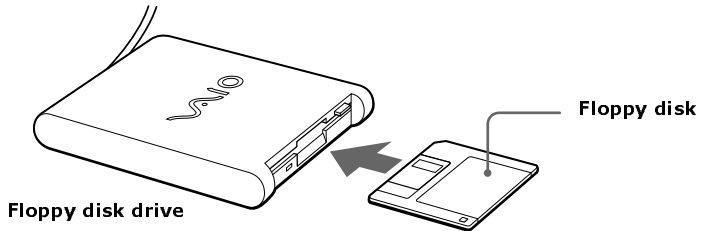
Connecting an External Floppy Disk Drive



To insert a floppy disk into the external floppy disk drive

- 1 Hold the floppy disk with the label side facing upward.
- 2 Gently push the floppy disk into the drive until it clicks into place.

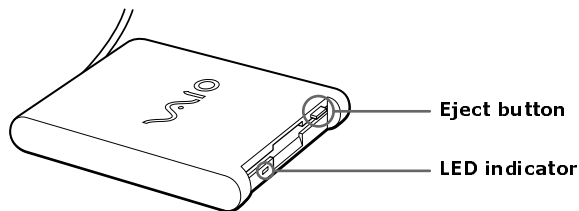
Inserting a Floppy Disk




To remove a floppy disk from the external floppy disk drive

- 1 Close all applications that were opened from the disk and wait for the LED indicator to turn off.
- 2 Push the Eject button, and remove the disk.

Removing a Floppy Disk



To disconnect an external floppy disk drive when the notebook is on

- 1 Double-click  in the task tray. The “Unplug or Eject Hardware” dialog box opens.
- 2 Click USB Floppy Disk Drive to select it, and click Stop.
- 3 Confirm USB Floppy Disk Drive is selected in the “Stop a hardware device” dialog box.
- 4 When the message, “Floppy Disk Drive can now be safely removed from the system” opens, click OK.
- 5 Unplug the external floppy disk drive from the notebook.

To carry an external floppy disk drive

Fold the floppy disk drive cable and connector into the side compartment on the floppy disk drive.

Carrying an External Floppy Disk Drive



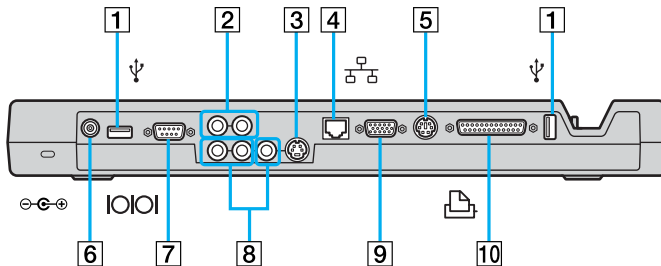
Notes on handling floppy disks

- ☐ Do not open the shutter manually and touch the surface of the floppy disk.
- ☐ Keep floppy disks away from magnets.
- ☐ Keep floppy disks away from direct sunlight and other heat sources.

Connecting a Port Replicator

Your notebook supports the use of a port replicator (not supplied). Attaching a port replicator enables you to connect additional peripherals to your notebook.

Port Replicator (Rear Panel)



1	USB ports	6	DC In port
2	LINE IN jacks	7	Serial port
3	S Video Out jack	8	LINE OUT jacks and Composite Video Out jack
4	Network port (Ethernet 10BASE-T/100BASE-TX port)	9	VGA (Monitor) port
5	Mouse/Keyboard (PS/2) port	10	Printer port

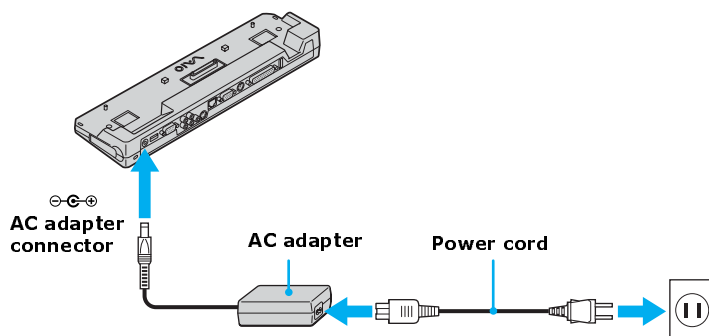
To attach the notebook to the port replicator

First, connect the supplied AC adapter or another Sony AC adapter (not supplied) to the port replicator to supply power to the notebook once the port replicator is attached.

The port replicator can be powered only by the AC adapter, so the AC adapter must remain connected to the port replicator at all times while it is in use. If the AC adapter is disconnected and/or the AC outlet is unplugged while using the port replicator, the computer may malfunction and data may be lost.

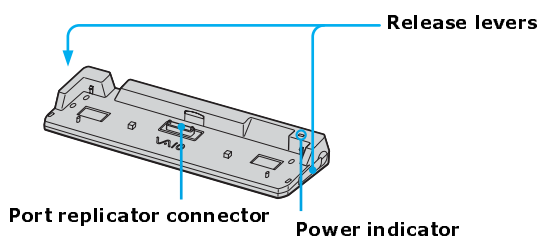
- 1 Turn off the notebook and disconnect all peripheral devices.
- 2 Plug the AC adapter connector into the **DC IN** port on the port replicator, and plug the power cord into the AC adapter and an AC outlet.

Connecting AC Adapter to Port Replicator



You will know the power is on when the green power indicator located on top of the port replicator switches on.

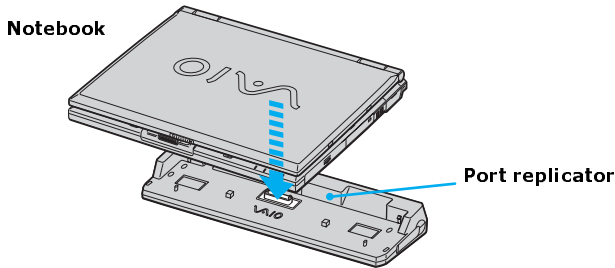
Power Indicator




- 3 Close the tilt stands before attaching the notebook to the port replicator.

- 4 Align the connector on the bottom of the notebook with the port replicator connector and push the notebook down until it clicks into place.


Attaching Notebook to Port Replicator



- 5 Turn on the notebook.

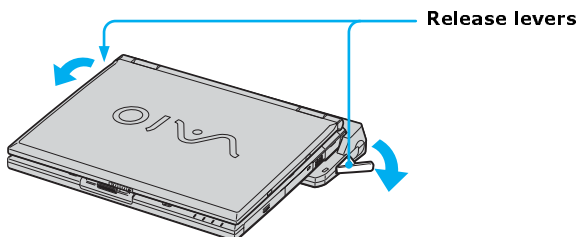
 When attaching your notebook to the port replicator, do not attempt to insert or remove the battery pack. Lifting and turning the notebook with an attached port replicator could cause a temporary loss of power.

To remove the notebook from the port replicator

- 1 Double-click  in the task tray. The “Unplug or Eject Hardware” dialog box opens.
- 2 Select all active peripheral devices, and click Stop. Then click OK to remove the device safely from the system.
- 3 Once all active peripheral devices are disengaged, disconnect the device connectors from the port replicator.

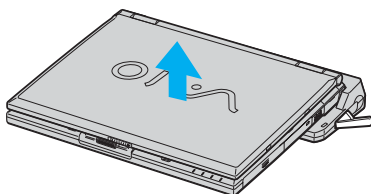
- 4 Pull the release levers on each side of the port replicator to release the notebook from the port replicator.

Releasing Notebook from Port Replicator



- 5 Lift the notebook away from the port replicator.



Removing Notebook from Port Replicator



Connecting a PS/2 External Mouse or Keyboard

You can connect either an external PS/2® mouse or PS/2 keyboard to the port replicator (not supplied) using a similar type PS/2 plug or adapter. You may connect only one PS/2 device to the port replicator at a time.

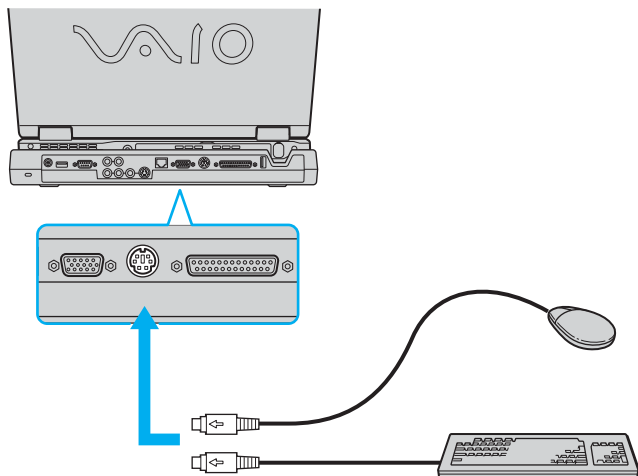
To connect an external mouse or keyboard


- 1** Shut down the notebook before you connect or disconnect the PS/2 external mouse or keyboard connector.
- 2** Connect the optional port replicator to the notebook.
- 3** Locate the Mouse/Keyboard (PS/2) port on the port replicator identified by the  /  symbols.

Change text in this variable definition to document title.

- 4 Plug the mouse or keyboard connector into this port with the arrow facing upward.

Connecting External Mouse or Keyboard



 See the manual that came with your PS/2 mouse or keyboard for more information on its installation and use.

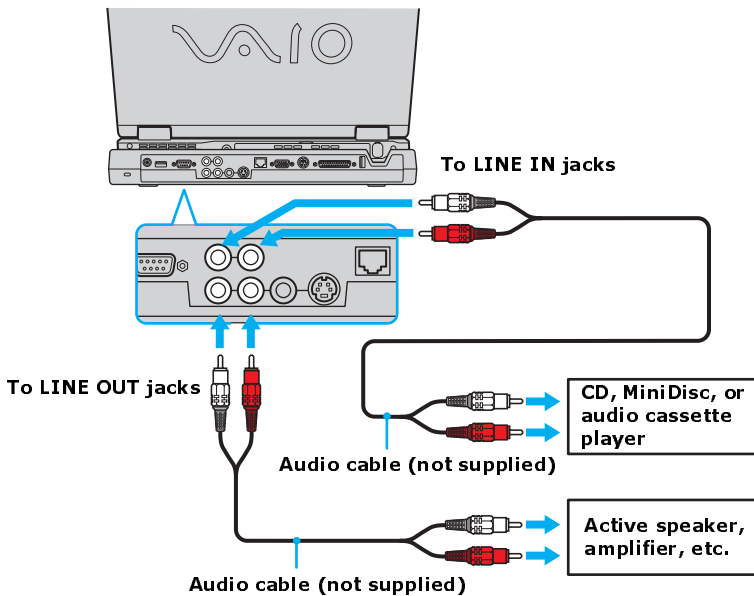
Connecting an Audio Device

You can connect an audio device to the port replicator (not supplied) or the notebook using mini-plug cables shorter than 2 meters with no resistance.

To connect a CD player, active speaker, or an amplifier

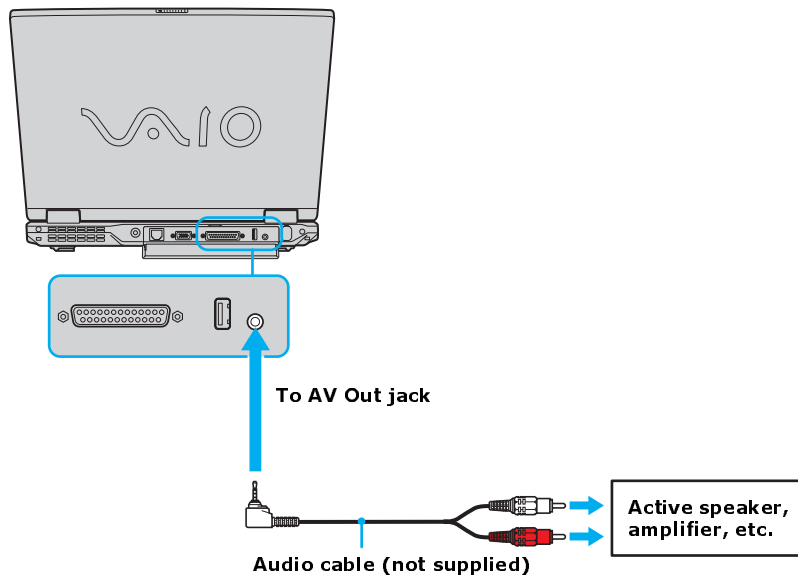
If you use the port replicator to connect a CD, MiniDisc, or audio cassette player, you may use the LINE IN jacks. To connect an audio output device to the port replicator, use the LINE OUT jacks. Both sets of jacks consist of one Audio (L) jack and one Audio (R) jack.

Connecting an Audio Device to the Port Replicator



To connect an audio output device to the notebook, use the AV Out jack and an audio cable (not supplied).

Connecting an Audio Device to the Notebook



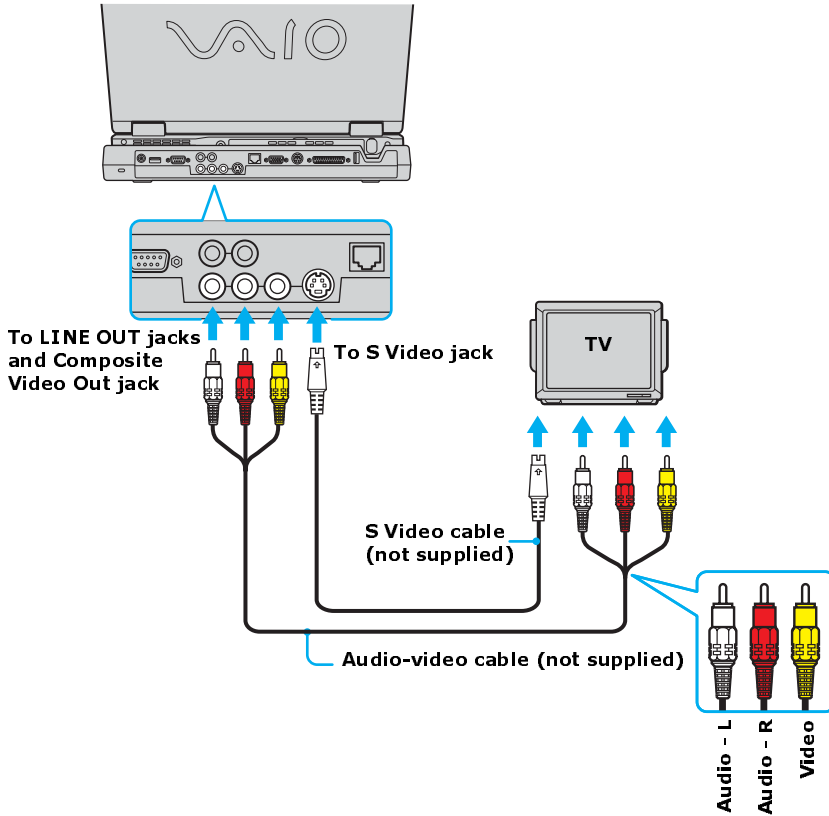
Connecting an Audio-Video Device

You can connect an audio-video (AV) device, such as a TV or a VCR, to the port replicator (not supplied) or the notebook.


To connect an AV device to the port replicator, use either the S Video jack or the LINE OUT jacks and the Composite Video Out jack. The S Video Out jack requires a S Video cable (not supplied), and the LINE OUT jacks and Composite

Video Out jack require an audio-video cable (not supplied). If you use the S Video jack, you must connect an audio cable to the LINE OUT jack located on the right panel.

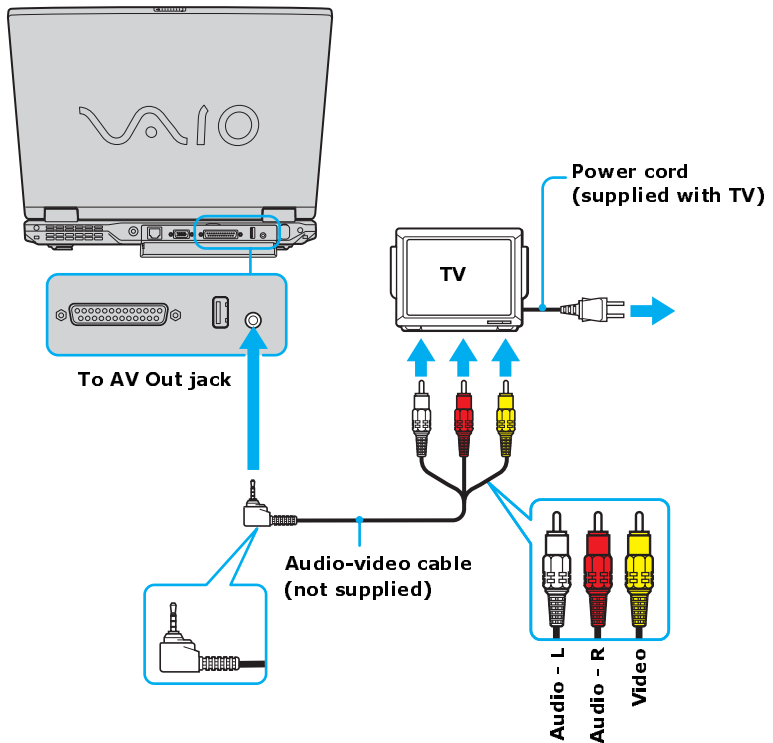
Connecting a TV to the Port Replicator with the S Video Jack



To connect an AV device to the notebook, use the AV Out jack and an audio-video cable (not supplied).

 The S Video Out jack and the AV Out jack are not designed to be used simultaneously. If you connect cables to both jacks, only the S Video jack will function.

Connecting a TV to the Notebook



Regardless if you use the port replicator or the notebook to connect an AV device, you will need to switch the TV input channel to external input and set up the TV configuration system. See “Selecting the Display Mode” for more information.

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

To change the display


If you insert a DVD in your optical drive to watch on your TV, the Fn+F8 key combination might not activate the function to toggle between your LCD and TV. Follow the procedure below.

- 1** Connect the TV to the notebook.
- 2** Restart the notebook and wait until it finishes rebooting.
- 3** Use the Fn+F8 key combination to toggle between the LCD and TV display. The DVD will play on only one display at a time, so select either LCD or TV as the primary display. See “Selecting the Display Mode” for more information.
- 4** Re-insert your DVD to launch your DVD software.

Connecting a Parallel Port Printer

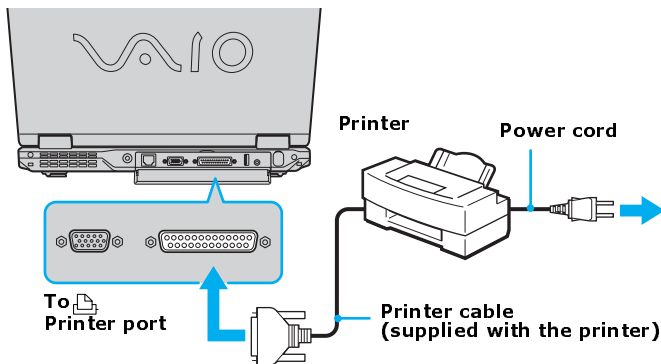
You can connect a Windows 2000 operating system-compatible printer to the port replicator (not supplied) or the notebook.

To connect a printer to the notebook

- 1 Locate the  Printer port on the rear panel of the notebook or the port replicator.
- 2 Plug the printer cable (supplied with the printer) connector into this port.

 You may need to change the printer settings before you use the printer. See “Displaying the Sony Notebook Setup Screen” for more information.

Connecting a Parallel Printer to the Notebook



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

If your printer stops functioning after resuming from a power saving mode, see “Troubleshooting the Printer” for more information.

Connecting a USB Printer

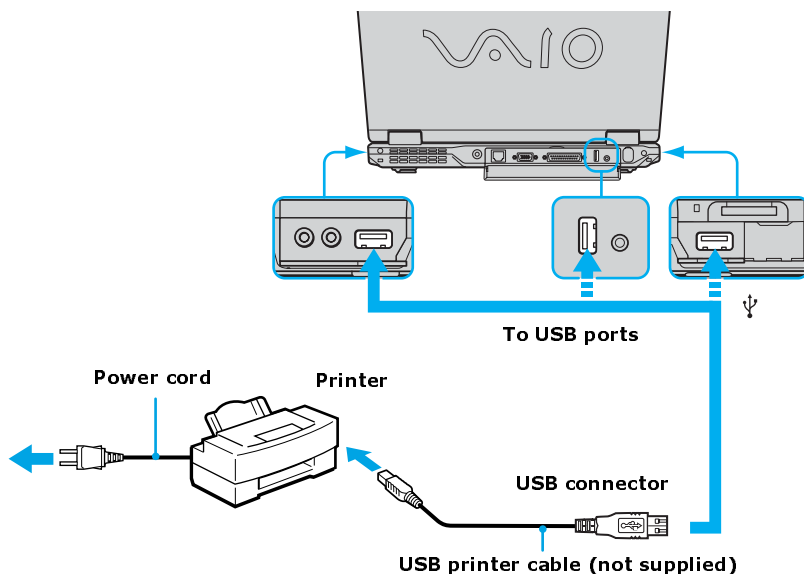
You can connect a Windows 2000 operating system-compatible USB printer to any of the three notebook USB ports or the two port USB ports on the port replicator (not supplied).

To connect a USB printer to the notebook

- 1 Plug the USB printer cable (not supplied) connector into the USB port on your notebook or port replicator, and plug the opposite end of the cable into the USB port on your printer.

 To use a printer, first install the driver software that came with your printer.

Connecting a USB Printer to the Notebook



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

Connecting an External Display

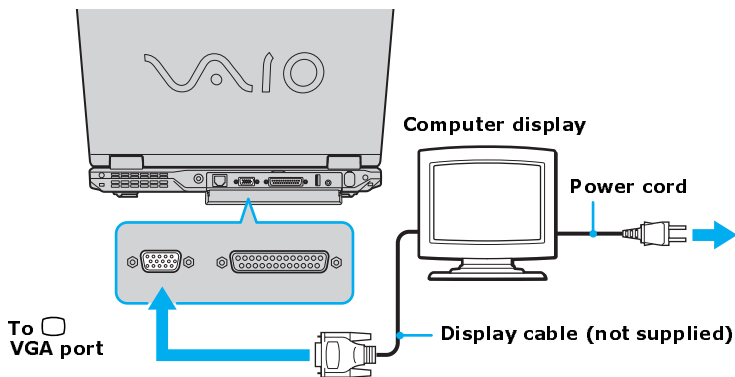
You can connect any one of the following external displays to your notebook or port replicator (not supplied).

- ☐ Computer display (monitor)
- ☐ Multimedia computer display
- ☐ Projector

To connect a computer display to the notebook

- 1 Shut down the computer before you connect the computer display.
- 2 Locate the ☐ VGA (Monitor) port on the rear panel of the notebook or port replicator.
- 3 Plug the display cable (not supplied) connector into the VGA (Monitor) port.
- 4 Verify that the power cord is plugged into the computer display and an AC outlet.

Connecting an External Computer Display to the Notebook




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

To connect a multimedia computer display to the notebook

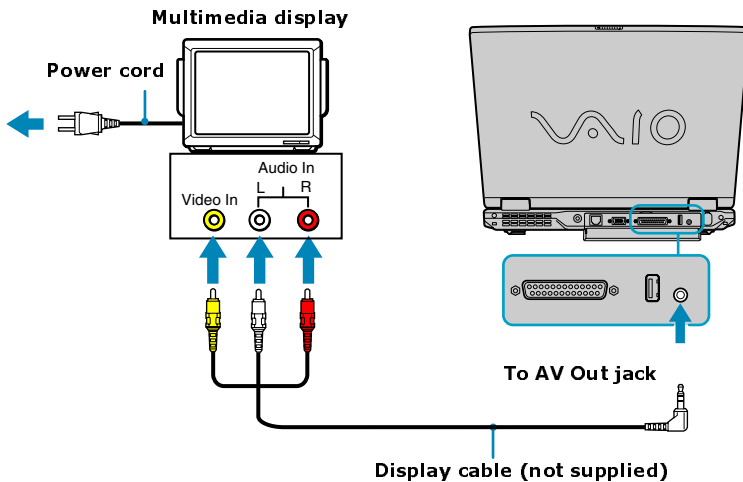
You can connect a multimedia computer display with built-in speakers and a microphone to the notebook or port replicator.


- 1** Shut down the computer before you connect the multimedia computer display.
- 2** Locate the AV Out jack on the rear panel of the notebook.
- 3** Plug the display cable (not supplied) connector into the AV Out jack, and plug the opposite end of the display cable into the multimedia computer display. Pressing the Fn + F8 keys toggles between LCD-only and dual LCD/TV display modes.

- 4 Verify that the power cord is plugged into the multimedia computer display and an AC outlet.

 Connect the cable before you turn on the notebook, otherwise Fn + F8 will not work. You cannot use the Fn + F8 function to switch between LCD and TV once a DVD is inserted into the optical drive.


Connecting a Multimedia Computer Display to the Notebook



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

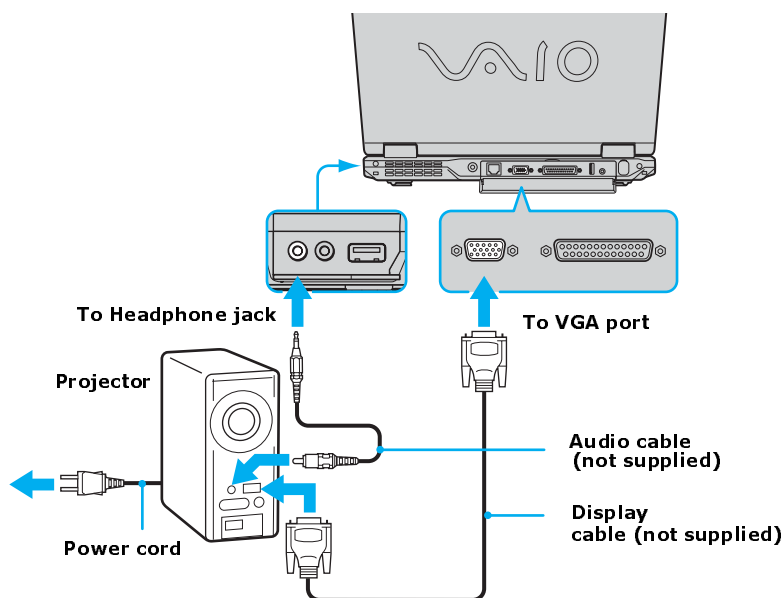
To connect a projector to the notebook

You can also connect a projector, such as the Sony LCD Projector, to the notebook or port replicator.

- 1 Shut down the computer before you connect the projector.
- 2 Locate the  VGA (Monitor) port on the rear panel of the notebook and the Headphone jack on the right panel of the notebook.

- 3 Plug the display cable (not supplied) connector into the VGA port, and plug the audio cable (not supplied) connector into the Headphone jack.
- 4 Plug the opposite end of the cables into the appropriate ports on the projector.
- 5 Verify that the power cord is plugged into the projector and an AC outlet.

Connecting a Projector to the Notebook

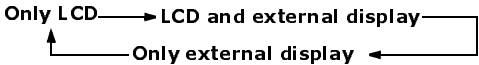


 See the manual that came with your projector for more information on its installation and use.

To change the display when connecting an external computer display or projector

When you connect an external display to the ☐ VGA (Monitor) port, you can toggle the output between the Liquid Crystal Display (LCD), the external monitor, or both devices.

Use the Fn+F7 key combination to select the display you want. See “Selecting the Display Mode” for more information.

<i>To</i>	<i>Press</i>	<i>Result</i>
Switch to an external display	Fn+F7	<p>Toggles between the LCD, the external display connected to the Monitor port, or both the LCD and external display.</p>  <pre> graph TD A[Only LCD] --> B[LCD and external display] B --> C[Only external display] C --> A </pre>




(On selected models) Connect the external display to the notebook or port replicator before you turn on the unit, otherwise the Fn+F7 key combination will not work.

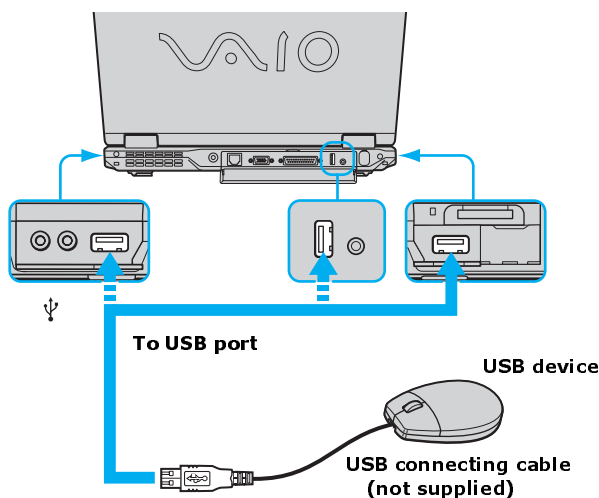
Connecting a Universal Serial Bus Device

You can connect a Universal Serial Bus (USB) device, such as an external mouse, keyboard, speaker, and microphone, to your notebook or port replicator (not supplied).

To connect a USB device to the notebook

- 1 Locate the  USB port on the rear, left, or right panel.
- 2 Plug the USB cable (not supplied) connector into this port, and plug the opposite end of the cable into the USB device, if it is not already connected.


Connecting USB Device to a USB Port



You can use a Sony USB PCGA-UMS1 series mouse (not supplied) with this computer. The USB mouse software driver is preinstalled in the notebook, so you simply plug the USB mouse into the USB port to use it. One USB port generally supports one USB device.

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

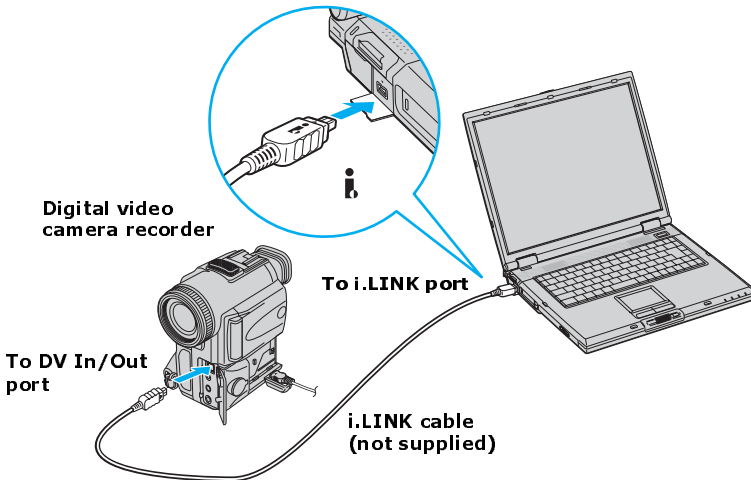
Connecting an i.LINK Device

You can connect an i.LINK®* enabled digital video camera recorder to the i.LINK® S400  (IEEE 1394) port on the notebook.

To connect a digital video camera recorder

- 1 Plug the i.LINK® cable (not supplied) connector into the i.LINK port on the left panel of the notebook.
- 2 Plug the opposite end of the i.LINK cable into the DV In/Out port on the digital video camera recorder.

Connecting Digital Video Camera Recorder to i.LINK Port*




* In this illustration, a Sony digital video camera recorder is connected to the notebook. Instructions for connecting a different type of digital video camera recorder may differ.

* i.LINK is a trademark of Sony used to designate that a product contains an IEEE 1394 connector. The i.LINK connection may vary, depending on the software application, operating system, and compatible i.LINK devices. All products with an i.LINK connection may not communicate with each other. Refer to the documentation that came with your compatible i.LINK device for more information on operating conditions and proper connection. Before connecting compatible i.LINK PC peripherals to your system, such as a CD-RW or hard disk drive, confirm their operating system compatibility and required operating conditions.

Notes on connecting an i.LINK device

- ❑ Only the Sony digital video camera port labeled “DV In/Out” or “i.LINK” are i.LINK-compatible.
- ❑ Do not connect more than one digital video camera at a time. The software supplied with your notebook will not recognize multiple cameras.
- ❑ The i.LINK port on the notebook does not supply power to external devices. If the external device requires power from the i.LINK port, you cannot use the device with the notebook.
- ❑ The notebook supports transfer rates up to 400 Mbps; however, the actual transfer rate is the lowest transfer rate of the external device.
- ❑ The i.LINK features available may vary depending on the software applications you use. See the documentation that accompanied your software for more information.

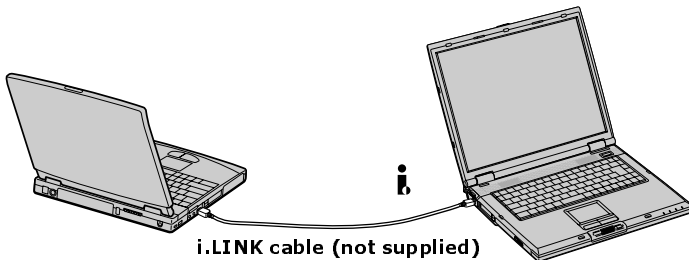
 See the manual that came with your digital video camera recorder for more information on its installation and use.

Connecting with another VAIO computer

The preinstalled Smart Connect software enables you to use an i.LINK®* cable (not supplied) to connect your VAIO notebook to another computer that also has Smart Connect. You can then use one computer to edit, copy or delete files on the other computer. You can also print from a printer attached to either computer.

See Smart Connect online help for more information.

Connecting with an i.LINK Cable



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

To connect VAIO computers that do not have the latest Windows® operating system, Smart Connect software may be necessary. Consult the Sony Web site for support options (<http://www.sony.com/pcsupport>).

* i.LINK is a trademark of Sony used to designate that a product contains an IEEE 1394 connection. The i.LINK connection may vary, depending on the software applications, operating system, and compatible i.LINK devices. All products with an i.LINK connector may not communicate with each other. Refer to the documentation that came with your compatible i.LINK device for information on operating conditions and proper connection. Before connecting compatible i.LINK PC peripherals to your system, such as a CD-RW or hard disk drive, confirm their operating system compatibility and required operating conditions.


Connecting External Speakers

You can enhance the sound quality of your notebook by connecting external speakers (not supplied).

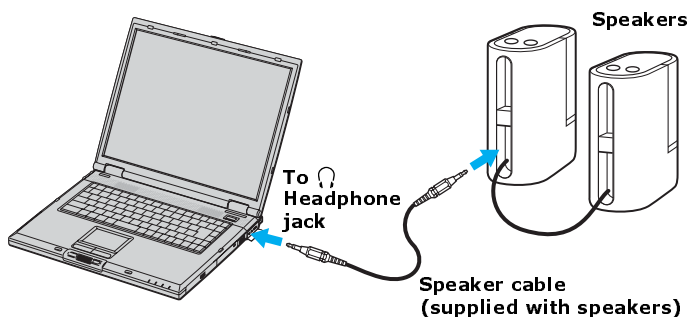


Do not place floppy disks on the speakers; the speakers' magnetic field may damage the data on the floppy disks.

To connect external speakers

- 1 Verify that your speakers are designed for notebook use, and turn down the volume of the speakers.
- 2 Locate the  Headphone jack on the right panel of the notebook, and plug the speaker cable (supplied with speakers) connector into this jack.

Connecting Speakers to the Headphone Jack




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

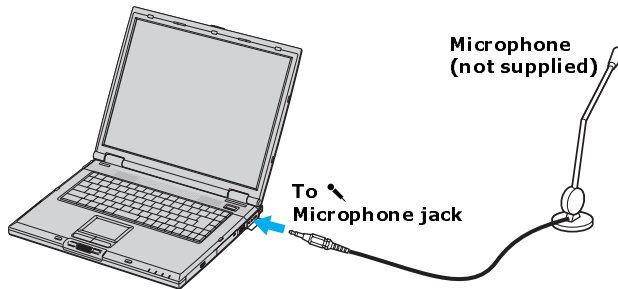
Connecting an External Microphone


You can enhance the quality of sound input by using an external microphone (not supplied).

To connect an external microphone

- 1 Verify that your microphone is designed for notebook use and compliant with the plug-in power microphone.
- 2 Locate the  Microphone jack on the right panel of the notebook. A protruding dot above the Microphone jack distinguishes this jack from the Headphone jack.
- 3 Plug the microphone cable (supplied with microphone) connector into the Microphone jack.

Connecting a Microphone to Microphone Jack



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

Expanding Your Notebook Capabilities

The following peripheral devices can be connected to your notebook to expand the capabilities of your computer and enhance its versatility to meet your various business or personal needs:

- ☐ A Personal Digital Assistant (PDA)
- ☐ A Wireless LAN Access Point
- ☐ A Wireless LAN PC Card

Personal Digital Assistant

A handheld PDA is the quintessential personal planner and entertainment center that fits in your pocket. With a PDA, you can easily perform the following functions:

- ☐ Enter your schedule details in the calendar and view them by the day, week, or month, and even set an alarm to remind you of important events.
- ☐ Keep your contact names, addresses, phone numbers, and other details in the address book, and find them when you need them.
- ☐ Add tasks to the To Do List, prioritize them, and assign them due dates.
- ☐ Synchronize your data with the software on your notebook to back up your data.
- ☐ Track expenses when you are out of the office, and transfer the data to your notebook.
- ☐ Exchange data with your notebook.

Wireless LAN Access Point

The Wireless LAN Access Point is designed for building a wireless Local Area Network (LAN) environment. The Access Point comes with the Wireless LAN PC Card and required software. You can easily build a wireless LAN environment by plugging the Access Point into an AC power outlet, installing the Wireless LAN PC Card in your notebook, and using the provided software. Because a wireless LAN configuration requires no wiring, you can operate multiple computers more freely than ever before.

You can also connect your Access Point to a telephone line, Integrated Services Digital Network (ISDN) router, cable modem, or Digital Subscriber Line (xDSL) modem to share access to the Internet among multiple computers.

Wireless LAN PC Card

The Wireless LAN PC Card, which comes with the Wireless LAN Access Point, can be purchased separately and is designed for building a wireless LAN environment. The Wireless LAN PC Card can be used with or without the Access Point. With the Access Point, you can build a wireless LAN between computers that are equipped with the Wireless LAN PC Card and gain access to the Internet. Without the Access Point, you can achieve direct communication (Peer to Peer mode) between computers.



For more information on Sony Wireless LAN, go to <http://www.ita.sel.sony.com/support/wirelesslan>.

Customizing Your VAIO Notebook

You can customize the settings of your notebook. The following sections briefly describe how to change your notebook's default settings. You can also refer to Sony Notebook Setup Help for more detailed information.

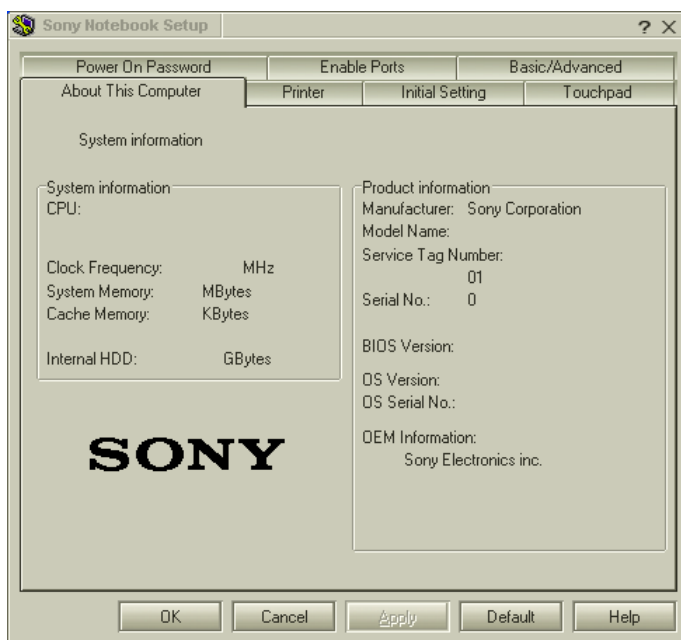
- ☐ Displaying the Sony Notebook Setup Screen
- ☐ Controlling Power Management
- ☐ Displaying Battery Information
- ☐ Selecting the Display Mode
- ☐ Display Properties Notes

Displaying the Sony Notebook Setup Screen

To display the Sony Notebook Setup screen:

- 1 Click the Start button on the Windows® taskbar.
- 2 Select Programs, Sony Notebook Setup, and then click Sony Notebook Setup.

Sony Notebook Setup Screen



- 3 Select the tab for the item you want to change. See “Sony Notebook Setup tabs” for more information.
- 4 After you finish making your changes, click OK.

Sony Notebook Setup tabs

Tab	Description
About This Computer	Display system information, including memory capacity, serial number, and BIOS version.
Printer	Select printer port mode settings.
Initial Setting	Change the volume of the sounds that play while the operating system is loading. Select the order of drives and devices from which you want to load the operating system. You can specify the hard drive as well as other drives inserted into your computer.
Touchpad	When you connect an optional mouse to your notebook, you can make your touchpad inactive. You can also customize the settings of your mouse using the mouse utility.
Power On Password	Set the password to secure your computer.
Enable Ports	Enable or disable ports. Disabling ports releases resources to the system. To change the serial settings, click Advanced on the Basic/Advanced tab.
Basic/Advanced	Switch between Advanced mode (additional screens with advanced settings) and Basic mode of display.



For more information about each option, click Help on the Sony Notebook Setup screen to display the Help file.

Controlling Power Management

The PowerPanel™ utility allows you to control the power management of your notebook and provides key information about system activity and battery life. The following sections briefly describe how to conserve your computer's battery power. You can also refer to PowerPanel Help for more detailed information. To activate a profile or command, see "Displaying Battery Information" for more information.

Viewing the Power Management status icons

The Power Management status icons are displayed in the taskbar at the lower-right corner of your screen. Move the pointer over the Battery icon to see the tool tip that displays information about the active profile. Double-click the icon for additional information. The Battery status icon indicates the battery power level and the Intel SpeedStep™ Technology status icon indicates the performance level of the CPU.

To activate the Power Management toolbar

- 1 Right-click the taskbar at the bottom of the screen.
- 2 Select Toolbars from the pop-up menu, and then click Power Management. The Power Management toolbar appears on the taskbar.

The current profile icon is highlighted on the Power Management toolbar. It is the first icon farthest to the left, and its appearance changes depending on which power management profile is currently selected. To change the power management profile, click the current profile icon, and then select a profile from the pop-up list. See "Power Management profiles" for a description of available options. To select another power management profile, click that icon in the Power Management toolbar.



When you use the battery pack to power your notebook, your system selects the Maximum Battery Life power management profile by default. If you select a different power management profile while using battery power, that profile is selected automatically the next time you use the battery pack to power your notebook.

Refer to the PowerPanel Help for information on customizing the Power Management toolbars.

You can change the power management settings, such as the system timer and the brightness of the screen.








To customize Power Management settings

- 1** Click the Current Profile icon on the Power Management toolbar.
- 2** Select Edit/Create Profiles from the menu.
- 3** Click a profile whose setting you want to change from the list in the left field.
- 4** Double-click an item whose setting you want to change from the list in the right field.
- 5** Click the desired setting.
- 6** Click the File menu, and then click Save.
- 7** Click the File menu, and then click Exit.

Power Management profiles

The PowerPanel utility provides several predefined power management profiles. Each profile consists of a group of power management settings that are designed to meet specific power management goals — ranging from maximum power management to no power management. You can change the settings for any of

the predefined profiles (except for the Disable Power Management profile), or you can create your own profile to suit your portable computing needs. The predefined profiles are:

Icon	Description
	Maximum Performance Provides the best system performance while still conserving power.
	Maximum Battery Life Provides power saving features to give you maximum battery life and good performance. It slows the notebook and puts it into Standby mode after a specified time period.
	Disable Power Management Turns off all power management features such as Standby and Hibernate modes. You cannot change the settings of this profile.
	AC Power The power management state when AC power is in use. Similar to the Power Management Off setting. Power Management automatically loads the AC profile unless you disable this feature.
	Games Disables the display and the Hard Disk Standby timer.
	Presentation Keeps the display on at all times while it conserves power. This option is ideal for slide show presentations. You can establish settings for LCD (Video) Standby, Hard Disk Standby, and Standby mode to optimize power management for your system.
	Camera Optimizes performance and power requirements for camera usage.

Icon

Description



DVD

Optimizes performance and power requirements for DVD usage.



Word Processing

Optimizes power management with longer timeouts on the hard disk and display screen. You can also establish settings for LCD (Video) Standby, Hard Disk Standby, and Standby mode to optimize power management for your system.



Spreadsheet

Optimizes performance and power requirements for spreadsheet applications.



Communications

Extends battery life by initiating a quick display timeout. The Internal modem remains powered. You can also establish settings for LCD (Video) Standby, Hard Disk Standby, and Standby mode to optimize power management for your system.





Automatic Profile Selection

Automatically switches to a profile suitable for active applications.

Power Management commands

PowerPanel also provides power management commands that you can use to activate specific power management functions and to control power for a specific device. You can use these commands to override a profile setting or initiate an immediate action.

<i>Icon</i>	<i>Description</i>
	Standby Puts the system into Standby mode, a power management state that saves the state of the system and peripheral devices in memory (RAM). Power consumption reduces to a minimum, and the system remains on. To return the system to the active state, press any key or the power button on your computer. Your notebook is preset to enter Standby mode after 25 minutes.
	Hibernate Provides for the lowest level of power consumption. The system writes the state of the system and peripheral devices to the hard disk and turns off the system power. To return the system to the original state, use the power button to turn on power. The system saves the data in the Save to Disk Partition on the hard drive.

Conserving battery power


When using your notebook with a battery, the LCD display and the hard drive can be set to switch off automatically to conserve battery power.




See “Power Management profiles” for more information.

Optimizing clock speed settings

To customize your notebook’s CPU performance, you can set the clock speed according to one of three available modes: Maximum performance, Auto performance, and Battery optimized.

Changing the clock speed mode

- ☐ Right-click the  flag icon on the lower-right portion of the taskbar, and select Adjust Properties. The “Intel SpeedStep™ technology” dialog box appears.
- ☐ Select one of the following modes:


<i>Icon</i>	<i>Mode Description</i>
	Maximum Performance The Maximum performance mode sets the CPU’s clock speed to its maximum speed at all times.
	Automatic In Auto performance mode, the CPU clock speed changes automatically, depending on usage.
	Battery Optimized Performance The Battery optimized mode reduces the CPU clock speed and battery voltage to conserve power when the notebook is operating on battery power.

Displaying Battery Information

You can display information for each of the batteries in your notebook. The following sections briefly describe how to display your notebook's general battery information. Refer to PowerPanel Help for more detailed information.

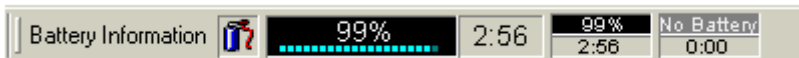
To activate the Battery Information toolbar

- 1 Right-click the taskbar at the bottom of the screen.
- 2 Select Toolbars from the pop-up menu, and then click Battery Information. The Battery Information toolbar appears on the taskbar.

 If the Battery Information toolbar is hidden behind the taskbar icons, right-click the taskbar and deselect Lock the Taskbar, then click and drag the edge of the Battery Information toolbar to the left.

To view the total charge remaining in the battery, place the pointer over the battery status icon in the taskbar on the lower-right corner of the screen.

Battery Information Toolbar



- ☐ **Percentage indicator** — Displays the percentage of the remaining charge.
- ☐ **Time indicator** — Displays estimated time (hours : minutes) remaining before the battery fully discharges, also known as the time-to-empty.

Battery icon descriptions

<i>Battery icon</i>	<i>Battery status</i>
----------------------------	------------------------------



Charging



Fully charged



Discharging

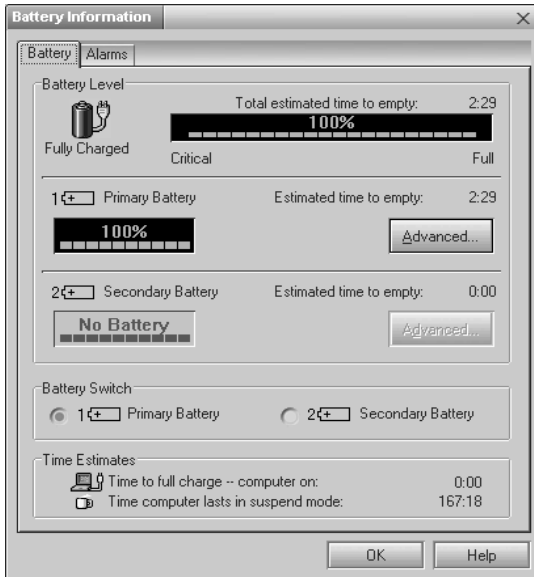


No battery

Displaying detailed battery information

Double-click the battery icon on the taskbar to display the Battery Information window. The Battery tab contains information such as battery charging time and duration of the battery charge.

Battery Information Window



Customizing the Battery Information toolbar and alarm system

You can customize the Battery Information toolbar and modify the alarm settings, to suit your portable computing needs. Refer to PowerPanel Help for more information.

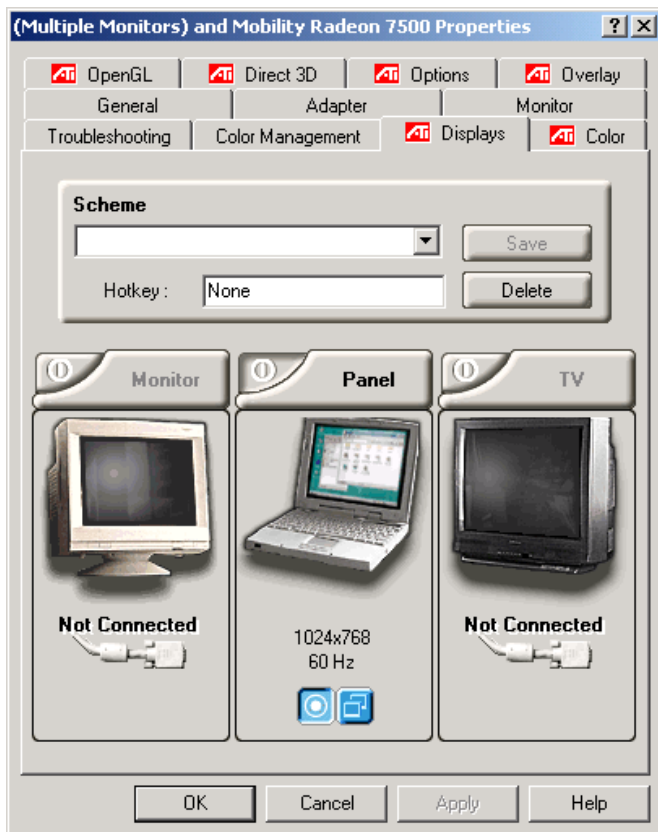
Selecting the Display Mode


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




- 1** Click the Start button, point to Settings, and then point to Control Panel.
- 2** Click the Display icon. The Display Properties window appears.


- 3 Click the Settings tab, and then click the Advanced button. The “(Multiple Monitors) and Mobility Radeon Properties” dialog box appears.

(Multiple Monitors) and Mobility Radeon Properties screen



- 4 Click the Displays tab and select the display settings by clicking the  icon on the panel of your display choice. For more information, click the Help button.

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

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

Turn on the notebook after you connect the external display.

Changing the window design of Sony software

To change the window design

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

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

Display Properties Notes

If you change the factory display screen settings to 1600 x 1200 pixels, you can increase the display font size as well.

To increase the display font size

- 1** Click Start, point to Settings, point to Control Panel, and select Display. The Display Properties window appears.
- 2** Click the Settings tab, and click Advanced. The Mobility Radeon Properties window appears.
- 3** Select a larger display font size.
- 4** Click OK.

Adding Memory

In the future you may want to install memory modules to expand the functionality of your notebook. The amount of memory on your notebook will vary depending on the model you purchased. See the Specifications flyer that came with your notebook for the amount of memory preinstalled. Expansion memory modules are available as options. For memory upgrades and information on which memory modules to use, refer to the Specifications sheet. This section describes how to replace memory modules in your computer.

- ☐ Precautions and Procedures
- ☐ Typical expansion memory configuration
- ☐ Removing a memory module
- ☐ Installing a memory module
- ☐ Viewing the amount of memory

Precautions and Procedures

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



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

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

Typical expansion memory configuration

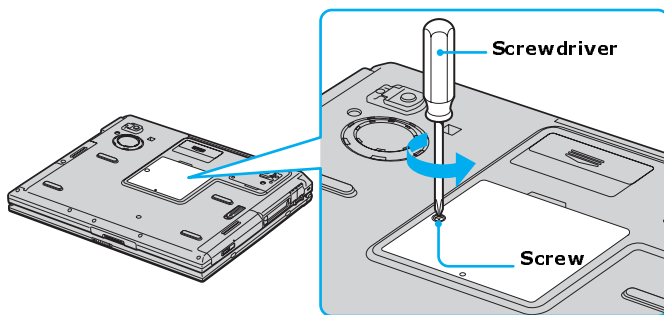
Models with 256 MB Memory

Total System Memory (MB)	Slot 1 (MB)	Slot 2 (MB)
256	256	
384	256	128
512	256	256

Removing a memory module

- 1** Shut down your notebook and disconnect all peripheral devices, such as your printer.
- 2** Unplug your notebook and remove the battery pack(s).
- 3** After your notebook has cooled, loosen and remove the screw that secures the cover of the memory bay on the bottom of your notebook. Use an appropriate screwdriver.

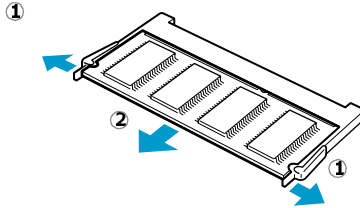
Removing the memory module cover



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

- 5 Remove the memory module.

Removing memory module



- ① Pull the tabs in the direction of the arrow . The memory module is released . ② Pull the memory module in the direction of the arrow .

- 6 Tighten the screw on the memory bay cover.

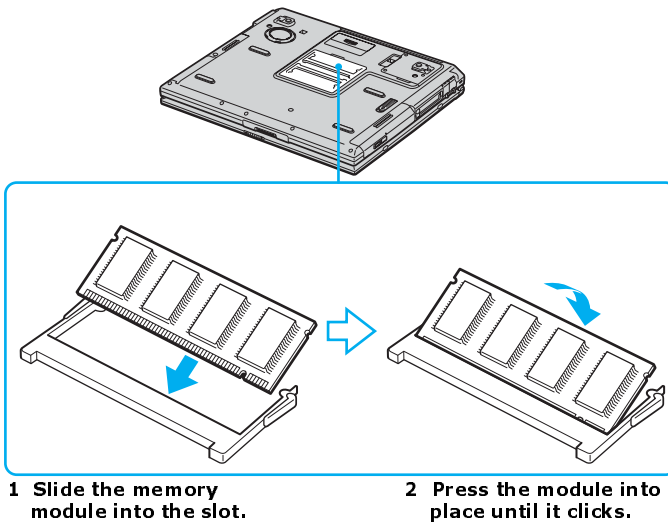


Your notebook comes with a memory module installed in the memory slot. To upgrade your memory, removal of this module may be necessary before installing your upgrade memory module(s).

Installing a memory module

- 1 Follow steps 1 to 4 of “Removing a memory module” for removing the preinstalled memory.
- 2 Remove the new memory module from its packaging.
- 3 Install the memory module by sliding it into the memory module slot. Push the module into place until it clicks.

Installing memory module



- 4 Tighten the screw on the cover of the memory bay.

Viewing the amount of memory

- 1** Restart the notebook.
- 2** (Windows® XP) Click Start on the Windows® taskbar, select All Programs, and click “Sony Notebook Setup.” The Sony Notebook Setup screen appears. (Windows 2000) Click Start on the Windows® taskbar, select Programs, and then click “Sony Notebook Setup.” The Sony Notebook Setup screen appears.
- 3** Click the “About This Computer” tab to view the amount of system memory. If the additional memory is not shown, remove and reinstall the memory module.



The amount of memory displayed in the Sony Notebook Setup screen is not always correct. The video adapter uses some system memory, and that amount of memory does not appear as part of the total memory shown in the Sony Notebook Setup screen.

About the Software on Your Notebook

Your VAIO® notebook is ready to help you work, play, learn, and communicate as soon as you turn it on. This section provides you with information on the following topics:

- ☐ Software Overview
- ☐ Application, Driver, and System Recovery CDs
- ☐ Using Your Recovery CDs

Software Overview

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

Adobe® Acrobat® Reader®

Adobe Systems Inc.

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

Adobe® Photoshop® Elements (On selected models)

Adobe Systems Inc.

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

Adobe® Premiere® LE (On selected models)

Adobe Systems Inc.

Adobe Premiere LE software offers interface and editing tools for producing movies for video, multimedia, or the Web. View source clips and edited footage simultaneously on-screen. You can create your own personal video clips that are up to three hours in length, with complete audio-video synchronization.

America Online®

America Online, Inc.

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

ArcSoft PhotoPrinter® 2000 Pro

ArcSoft, Inc.

ArcSoft PhotoPrinter Pro software is an easy-to-use, yet advanced printing program that lets you quickly lay out multiple images in multiple sizes on a single sheet of paper. ArcSoft PhotoPrinter Pro software offers a wide selection of templates including landscape, portrait, free-style, mixed sizes, custom templates and more. The application includes enhancement tools and special effects for improving photos while giving you the ability to add text to any image. With ArcSoft PhotoPrinter 2000 Pro software you can create business cards, handouts, calendars, mailing labels, and much more.

DigitalPrint

Sony Electronics Inc.

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

Drag'n Drop CD (On selected models)

DigiOn, Inc., and Easy Systems Japan Ltd.

Drag'n Drop CD is designed to be the most simple software to make your own CD. Users can create their own best AudioCD, or data CD that can be read in many PCs. With Drag'n Drop CD you can also create your own backup CD from the original CD that you own.

DVgate™

Sony Electronics Inc.

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

EarthLink Network Total Access®

EarthLink, Inc.

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

EverQuest (On selected models)

Sony Online Entertainment Inc.

This introductory edition of EverQuest, a living, constantly evolving fantasy world, takes users to new heights of online role-playing gaming. Enter an enormous virtual environment—an entire world with its own diverse species, economic systems, alliances, and politics. Make yourself a noble human knight, a vicious dark elf thief, a greedy dwarven merchant, or whatever your heart desires as you meet new friends from around the world and face epic challenges.

Microsoft® Office XP Small Business Edition (On selected models)

Microsoft Corp.

With Microsoft Office XP system you'll find a powerful new technology that will help you get work done more quickly by providing real-time, context-sensitive options for important actions, from formatting to error correction. Task panes consolidate important tasks into a single integrated view, enabling you to conduct searches, launch and format documents, and view the contents of your Clipboard from one location.

Microsoft® Office XP Professional (On selected models)

Microsoft Corp.

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

Microsoft® Word (On selected models)

Microsoft Corp.

Microsoft Word makes it easy to create common Web, e-mail, and print documents for use around the world. It embraces HTML as a first-class file format and extends Word's ease-of-use to the Web and e-mail. Word also extends that ease-of-use to international users, making it easy to create multilingual documents.

MovieShaker™*Sony Electronics Inc.*

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

OpenMG™ Jukebox*Sony Electronics Inc.*

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

PC-Cillin® 2000*Trend Micro, Inc.*

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

PicoPlayer™*Sony Electronics Inc.*

PicoPlayer software is a video player utility that enables you to use Giga Pocket™ Personal Video Recorder functions on a computer that does not have Giga Pocket Personal Video Recorder installed. You can play Video Capsules created by Giga Pocket Personal Video Recorder, and, if a Giga Pocket Server is available on your home network, watch TV streamed from the Giga Pocket Server and remotely control the Giga Pocket Server's TV programming functions.

PictureGear™*Sony Electronics Inc.*

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

Quicken®

Intuit Inc.

Quicken software is the fastest, easiest way to organize your finances. Quicken software works just like your checkbook, so it's easy to learn and use. You can even pay your bills online. Quicken software manages all of your finances, bank accounts, credit cards, investments, and loans.

QuickTime®

Apple Computer, Inc.

The versatile QuickTime software is used to play hundreds of different kinds of files, including video, audio, and virtual reality (VR) movies. You can play QuickTime files (referred to as “QuickTime movies”) using QuickTime Player or any other application, such as a Web browser or word processor, that supports QuickTime software.

RealJukebox®

RealNetworks, Inc.

RealJukebox software is a popular digital music system that gives you the ability to easily acquire, play and manage digital music files. You can locate and download your favorite music from the Internet and organize your own personal music collection.



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

RealPlayer®

RealNetworks, Inc.

RealPlayer software is a high-quality streaming media player that supports many digital media formats. The user-friendly interface has enhanced navigation capabilities, allowing you to access and enjoy audio and video programming over the Internet. RealPlayer software is your gateway to a superb Internet multimedia experience.

Smart Capture*Sony Electronics Inc.*

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

Smart Connect*Sony Electronics Inc.*

Smart Connect enables you to use an i.LINK® cable to connect your VAIO® computer to another VAIO computer that supports Smart Connect. You can then use one computer to copy, delete, and edit files on the other computer. You can also print from a printer attached to either computer.

SonicStage™*Sony Electronics Inc.*

This new jukebox application adds a host of new features to its predecessor, OpenMG™ Jukebox. Continuing to take advantage of Sony's copyright-protected ATRAC3™ format for high-quality digital audio storage, SonicStage software sports a new music visualizer, a sleek new player skin design, audio CD burning capability, and a parametric equalizer for fine-tuning audio playback.

Sony on Yahoo!*Yahoo! Inc.*

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

VAIO Support Agent*Sony Electronics Inc.*

VAIO Support Agent provides immediate, interactive, online support with information about your preinstalled software and answers to frequently asked questions.

VisualFlow™

Sony Electronics Inc.

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

WinDVD®

InterVideo, Inc.

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

Application, Driver, and System Recovery CDs

Your notebook comes with the following application, driver, and system recovery CDs. To use your recovery CDs, see “Using Your Recovery CDs” for more information.

Application Recovery CD(s)

Sony Electronics Inc.

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

Driver Recovery CD(s)

Sony Electronics Inc.

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

System Recovery CD(s)

Sony Electronics Inc.

This CD enables you to restore the operating system and software that shipped with your computer if they become corrupted or are erased. This CD restores your computer to its original factory settings, so user data and applications installed since you started using your computer will be lost.

Using Your Recovery CDs


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

To use the Application Recovery CD(s)

The Application Recovery CD(s) allows you to reinstall individual applications if they become corrupted or are accidentally erased. Reinstalling an individual software title may correct a problem you are experiencing with your notebook or software application; you may not need to reinstall the entire contents of your hard drive. If you need to reinstall all the software titles that shipped with your notebook, use the System Recovery CD(s). See “To use the System Recovery CD(s)” for more information. If you have any questions on using the Application Recovery CD, contact Sony Customer Support.

 You must be in Windows to run the Application Recovery CD. If you have any questions on using the Application Recovery CD, contact Sony Customer Support.

- 1** Turn on your notebook. If your notebook is already on, close all applications.
- 2** When the Windows desktop appears, insert the Sony Application Recovery CD in the optical drive. The Application Recovery utility loads automatically.
- 3** When the Application Recovery menu appears, select the icon for the application you want to restore and then follow the on-screen instructions to complete the recovery process.

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

To use the Driver Recovery CD(s)

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



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

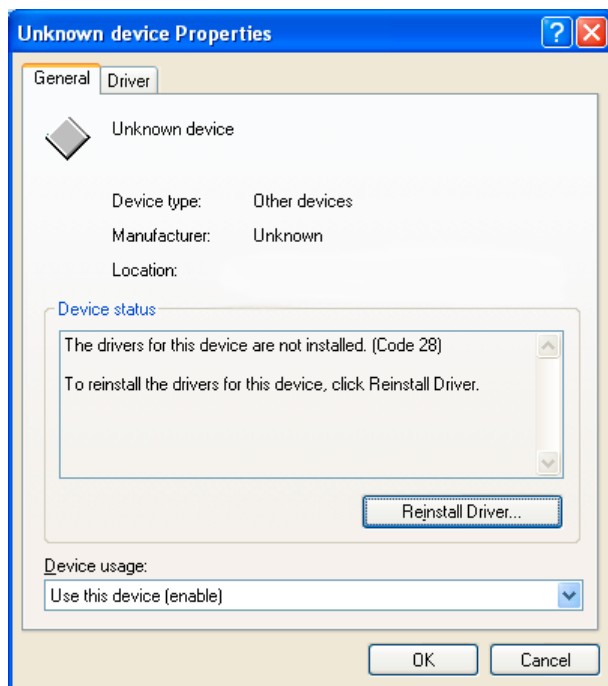
You must be in Windows to run the Driver Recovery CD utility.

Reinstalling specific drivers with the Driver Recovery CD (Windows® XP)

- 1** Turn on your computer. If your computer is already on, close all applications.
- 2** When the Windows desktop appears, insert the Driver Recovery CD into the optical disc drive.
- 3** Click Start in the Windows taskbar, and then Control Panel. The Control Panel window appears.
- 4** Click Performance and Maintenance, then System. The System Properties dialog box appears.
- 5** From the Hardware tab, click Device Manager.
- 6** Click to highlight the device for which you wish to reinstall the driver.

- 7 From the Actions menu, choose Properties. The Properties dialog box for that device appears.

Properties dialog box



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

Reinstalling specific drivers with the Driver Recovery CD (Windows® 2000)

- 1 Turn on your notebook. If your notebook is already on, close all applications.
- 2 When the Windows® desktop appears, insert the Driver Recovery CD in the optical drive.
- 3 Use My Computer or Windows Explorer to view the contents of the Driver Recovery CD.
- 4 Select the appropriate driver.

To use the System Recovery CD(s)

The System Recovery utility formats your hard disk drive and restores all original software applications. Your computer is returned to the original factory settings.



The System Recovery process removes all software that you may have installed since you started using your computer. Reinstall any applications that were not included with the computer when you purchased it.

You can use the System Recovery CD(s) to reinstall the operating system and software titles that shipped with your notebook if they become corrupted or erased. You may not need to reinstall the entire contents of your hard drive. If you experience a problem with your notebook, reinstalling an individual device driver or software title may correct the problem. Use the Application Recovery CD(s) to reinstall individual applications or use the Driver Recovery CD(s) to reinstall device drivers. See “To use the Application Recovery CD(s)” or “To use the Driver Recovery CD(s)” for more information.

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

System Recovery options

- ❑ **System Drive Recovery** — All data on Drive C is deleted. The factory default settings and software applications are restored on this drive only.

- ❑ **Change Partition Size** — All partitions, custom installations, and changes are removed from the hard disk drive. You can set the partition sizes for both the Drive C and Drive D. The original, preinstalled operating system and software applications are restored.
- ❑ **Recovery to Original Factory Defaults** — All data and partitions are removed from the hard disk drive. All original factory settings, operating system, and preinstalled software is restored.



The System Recovery utility does not back up your system's data. If you wish to retain your system data, perform a backup to an external media.

Using the System Recovery CD(s)


Your system may take a few minutes to load necessary files. A blue screen appears during the loading process.

- 1 Insert the Sony System Recovery CD in the optical drive. The System Recovery utility starts from the optical drive. The first CD must be in the drive when you turn on the notebook.
- 2 Shut down your notebook as described in the “Shutting Down Your Notebook” section of your printed Quick Start.
- 3 Wait 30 seconds and turn on your notebook.
- 4 The VAIO System Recovery Utility dialog box appears. Click Next.
- 5 At the pop-up prompt, select Yes to begin the system recovery process.
- 6 Follow the on-screen instructions.

If your notebook does not start from the Recovery CD

- 1 Press the power button and hold it for more than 4 seconds to turn off the notebook.
- 2 Turn on the notebook. When the Sony logo is displayed, press the F2 key. The BIOS setup menu screen appears.
- 3 Press the arrow keys to select the Exit menu.
- 4 Press the arrow keys to select “Get Default Values” and then press the Enter key. The message “Load default configuration now?” appears.

- 5 Make sure “Yes” is selected, then press the Enter key.
- 6 Press the arrow keys to select “Exit” (Save Changes) and then press the Enter key. The message “Save configuration changes and exit now?” appears.
- 7 Make sure “Yes” is selected, then press the Enter key. The notebook restarts from the Recovery CD.

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

The recovery process takes from 30 to 60 minutes to complete.

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

Updating the task tray (Windows 2000)

In the event that a system recovery is necessary, do the following to optimize your notebook's performance:


- 1 Right-click the Adaptec Create CD icon in the task tray. The Task tray properties menu appears.
- 2 Select Disable Adaptec Create CD. A dialog box appears, prompting you to confirm the setting.
- 3 Click Yes.

To recover Microsoft Word

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

VAIO AV Applications

Your VAIO® computer is preconfigured with a collection of audio and video (AV) applications that make it easy to use advanced multimedia technology. This section describes the VAIO® AV applications.

 Your computer may not be supplied with all of the software applications listed, depending on the system configuration you purchased.

Your computer's visual presentation of the VAIO AV applications may not appear exactly as shown in this section, depending on the specific computer model you purchased.

Overview of Preinstalled Software

DigitalPrint

Sony Electronics Inc.

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

DVgate™

Sony Electronics Inc.

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

Media Bar® DVD Player

Sony Electronics Inc.

Media Bar DVD Player is created especially for high-quality DVD playback. You can enjoy the superior digital video quality and the effects features. You can rewind or fast-forward scenes from the DVD Player monitor as you would with any ordinary DVD player, to easily find the scene you want to view. Typical DVD playback features are available, such as multiple angles, audio language tracks, and subtitles. Media Bar DVD Player seamlessly integrates a premium audio/visual experience with an easy-to-use software interface.

MovieShaker™

Sony Electronics Inc.

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

PictureGear™

Sony Electronics Inc.

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

Smart Capture

Sony Electronics Inc.

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

SonicStage*Sony Electronics Inc.*

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

SonicStage Premium*Sony Electronics Inc.*

SonicStage Premium is a special jukebox application that supports high quality digital audio playback and recording from the NetMD, FM Tuner, and DVD-RW devices in your VAIO MX Desktop PC. Recording from external analog and digital audio devices, such as CD players and MiniDisc players, is also supported. SonicStage Premium includes several standard jukebox features, including a music visualizer, audio CD burning capability, and a parametric equalizer for fine-tuning audio playback.

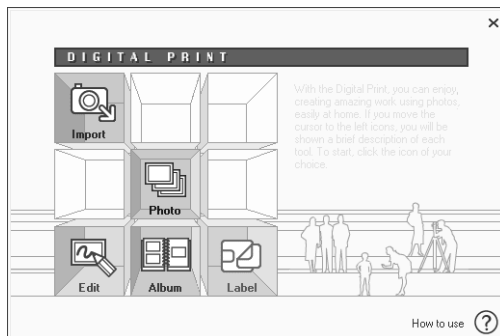
VisualFlow™*Sony Electronics Inc.*

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

DigitalPrint Software


DigitalPrint is designed to creatively manage your digital pictures. With its easy-to-use features, you can quickly load images from your digital camera or camcorder, print high-quality photos, and make personalized photo albums and labels to share with friends and family.

DigitalPrint main window



Using PhotoCapture

Capture and import your digital pictures from your digital camera or camcorder into your computer. You can select your favorite pictures and place them in handy folders for future use.

- 1 Click  (Import) to open the PhotoCapture window. Your connected digital camera, camcorder, or Memory Stick® media is indicated in the window.



Properly connect your digital camera, camcorder, or insert your Memory Stick media in your computer.

Change text in this variable definition to document title.

PhotoCapture window



- 2 Click the camera icon to open the Enter Photo Folder Name dialog box. You can enter a name for a new folder or click Select Photo Folder to import your pictures to an existing folder. Click OK.



Enter Photo Folder Name dialog box



-
- 3 Click Capture to capture still images. You can preview a thumbnail version of your pictures in the selection view window.

Capture Pictures from Video window



- 4 Select the desired pictures, and click Get Pictures. The PhotoCapture picture editor window appears.
- 5 Click View to see an enlarged version of a selected picture. You can use   (Rotate) to change the position of a selected picture. Click Delete to eliminate any unwanted pictures.


Change text in this variable definition to document title.

PhotoCapture editing window



Using PhotoCollection

You can select and print your favorite digital pictures, using your computer and home printer.

- 1 Click  (Photo) to open the PhotoCollection window. A list of folders is displayed on the left side of the window, with the folder contents displayed as thumbnail pictures on the right.

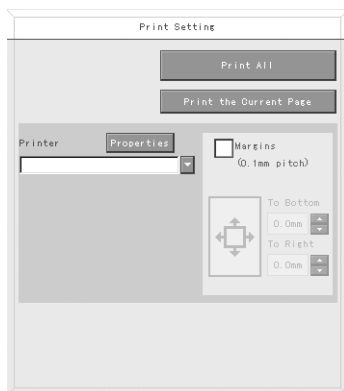
PhotoCollection window



- 2 Select the desired folder. From the thumbnail view, click to select the pictures you want to print.
- 3 Click Photo Print at the top of the window. Select the number of prints you want to make, using the scroll arrows. Click OK.
- 4 Select the paper, based on the picture positioning desired. A layout preview is displayed on the left side of the window.
- 5 Use the configuration buttons and drop-down lists to select the printer and to set margins.

Change text in this variable definition to document title.


Printer and Paper selection window



- 6 Click Print All to print all pages, or click “Print the selected page only” to print a specific page of photos.

Using PhotoDecor

You can decorate your favorite photos with clip art, stamps, or your own drawing talent. Add, remove, and change your designs to create your own unique photo art.

-
- 1 Click  (Edit) to open the PhotoDecor - New PhotoDecor window. A list of folders is displayed on the left side of the window, with the folder contents displayed as thumbnail pictures on the right.

PhotoDecor-New PhotoDecor window



- 2 Select the desired folder. From the thumbnail view, click to select the pictures you want to decorate. The PhotoDecor editing window appears.
- 3 Use the decoration features on the right side of the window by clicking on the desired decoration icon, and then dragging the decoration onto your photo.
- 4 Click Print when your photo is ready to be printed. You can save your decorated pictures before printing. Name the new picture, and click Save.




The default location for your saved decorated pictures is in the Decorated Photos folder, which can be viewed from the PhotoDecor - New PhotoDecor window.

Using PhotoAlbum


Capture your special photos in an organized photo album. You can share your custom-made photo albums with friends and family.

Change text in this variable definition to document title.

- 1 Click  (Album) to open the PhotoAlbum - New Album window.


PhotoAlbum - New Album window



 If you wish to work on a previously created album, do not click Create New Album. Instead, select the desired album from the Album Collection view on the right side of the window.


- 2 Click Create New Album. The Select Photo window appears.
- 3 Select the photos you want to include in your album from the available folders displayed. Click List to select individual pictures from each folder. The Select Design window appears.
- 4 Select a design template for your album. Use the scroll bar to see all available designs. When you have selected the design, the Select Layout window appears.
- 5 Select a page layout for your album. A preview of your selected design and page layout is displayed. Scroll through the album using the book icons at the bottom of the window.

- 6 Click Page List to edit your album. Customize your album by adding more pictures, decorations, comments, or deleting pages.
- 7 You can save your album before printing by clicking Save.
- 8 Click Print. Select an album type, and click Print again.

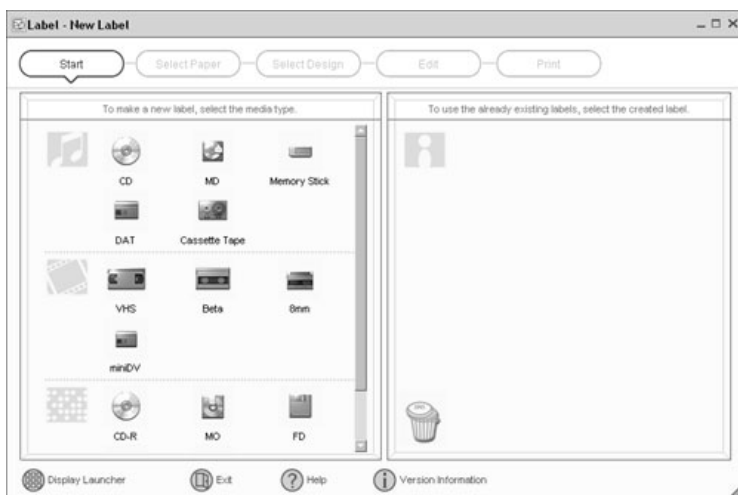
 For information on stitching your album, click Stitch Album. See the online Help file for more details.

Using LabelMaker

Use LabelMaker to design original labels to personalize your media, such as Memory Stick® media, CDs, or video cassettes.

- 1 Click  (Label) to open the Label - New Label window.


Label - New Label window



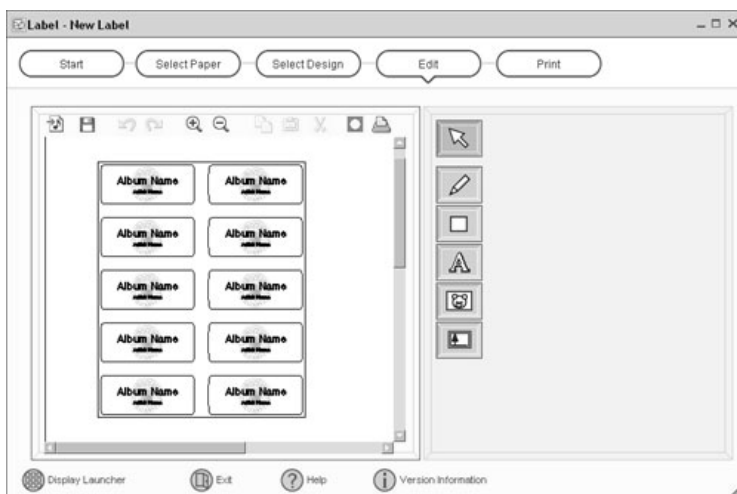
- 2 Click an icon to select a media type. A new window opens.
- 3 Click the paper layout icon. The Select Design window appears.

Change text in this variable definition to document title.

- 4 Select a design template. Use the decoration and customization features on the right by clicking an icon and dragging it onto your template.

 A new window appears, enabling you to list the contents of your audio or video media. You can create a song or video list, depending on the type of media label being created.

Design Edit window



- 5 Click Print to complete the label making process. Use the configuration buttons and drop-down lists to select the printer and to set margins.

 See the online Help for detailed information on using DigitalPrint software.

DVgate Software

Connecting a digital video camcorder

Turn off the power to your digital video camcorder before connecting it to your computer. After connecting the device, turn its power back on. You do not need to turn off the computer when connecting the camcorder.

To use DVgate™ software with a digital video camcorder

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

To use DVgate software to record AVI files to tape

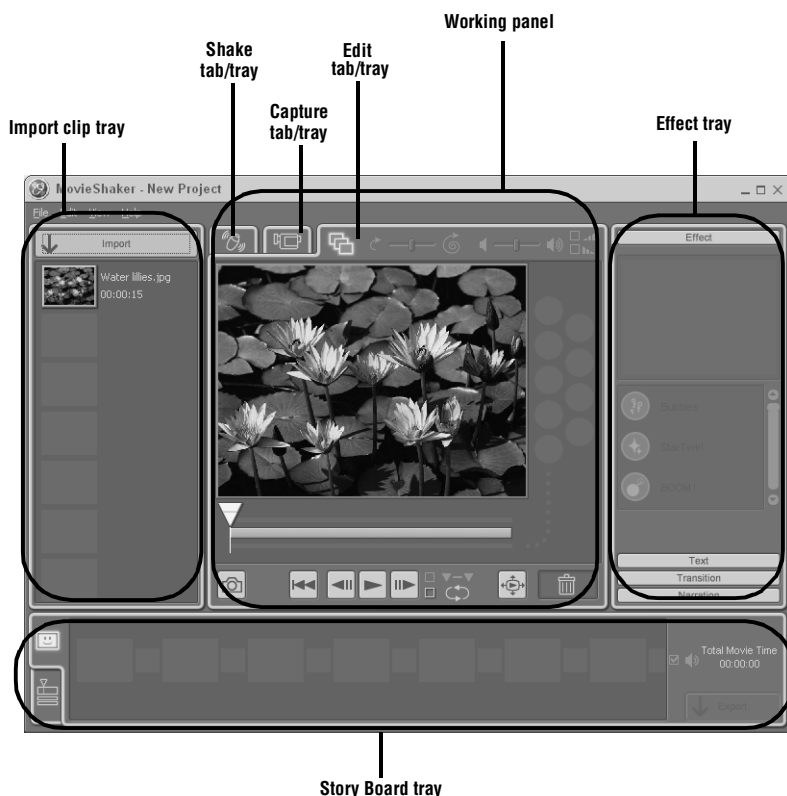
 You can record only AVI files. MPEG files cannot be recorded.

- ☐ Do not use DVgate™ software when the connected digital video device is in Timer Recording mode, as this could produce a malfunction in the device.
- ☐ Avoid recording problems, such as a single frame appearing in multiple frames, by closing other applications on your system while recording.
- ☐ You cannot use multiple audio modes on the same tape. If you have AVI files that use different audio modes, the files cannot be recorded at the same time, but must be recorded separately.
- ☐ The DVgate software does not support AVI files that are smaller than 4 MB.
- ☐ The DVgate software does not support hard disk compression.
- ☐ To maximize recording capabilities, video and audio data are not available while you are recording.
- ☐ If the DVgate software indicates that frames are dropped, try closing all open applications or defragmenting your hard drive.

MovieShaker Software

MovieShaker™ software can be used to create fun and innovative movies without any previous knowledge of film editing. In a few simple steps, video files can be made from still images with added special effects and music. You can save your personal video creation in a format that is compatible with most computers.


MovieShaker main window



Creating movies with MovieShaker software

Using your imported clips, you can create a short movie using the Shake feature. The Shake feature selects clips from the Story Board tray, adds effects, and combines them randomly into a 30-second movie. After you “Shake” your video, you can edit it by adding effects and text, by adjusting the color and contrast, and by modifying its length.

Importing images and sound clips

- 1 Click . The Import file browser window appears.
- 2 Find the clips you want to add.
- 3 Click the clips. The files are added to the Import clip tray.
- 4 Repeat this process to gather each of the images and video and sound clips you want to use in your movie.



You can delete a clip from the Import clip tray by dragging the clip's icon to the trash icon located on the Edit tray of the working panel.

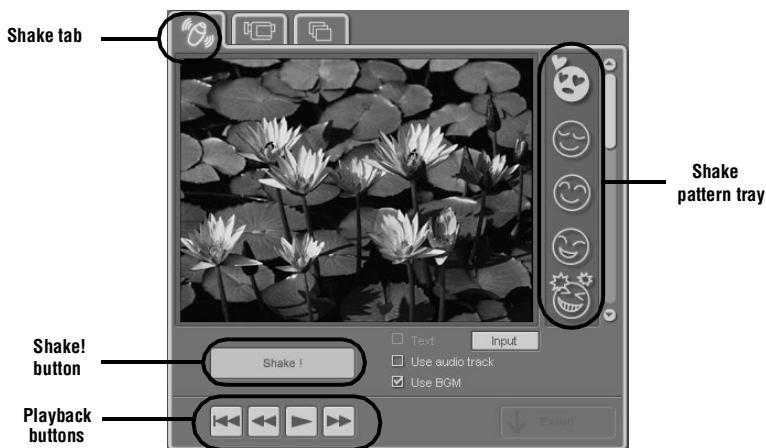


Importing image or sound files that are over 30 seconds in length may cause the MovieShaker software to stop responding.


Using the Shake feature

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

Shake tray



- 3 Click the Shake! button. A 30-second movie is automatically generated.
- 4 Optional: Add text to your new movie by clicking on the Input button.
- 5 To preview, rewind, or fast forward your movie, use the Playback buttons.

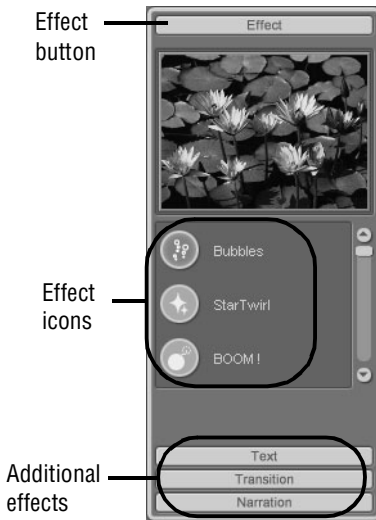
 Scenes created with the Shake feature begin with a black screen in the Shake tray window. Your scenes appear during movie playback.

You can improve the image quality produced by the Shake feature (at the cost of longer Shake times) by turning off the “Shorten the Shake time” feature in the General panel of the Setting dialog box. See the “Menu reference” section of the online Help file for details.


Adding effects to a scene or a clip

- 1 Double-click or drag the desired clip or scene to move it to the Story Board tray.
- 2 Click the Effect button on the Effect tray.

Effect tray window (Effect button selected)



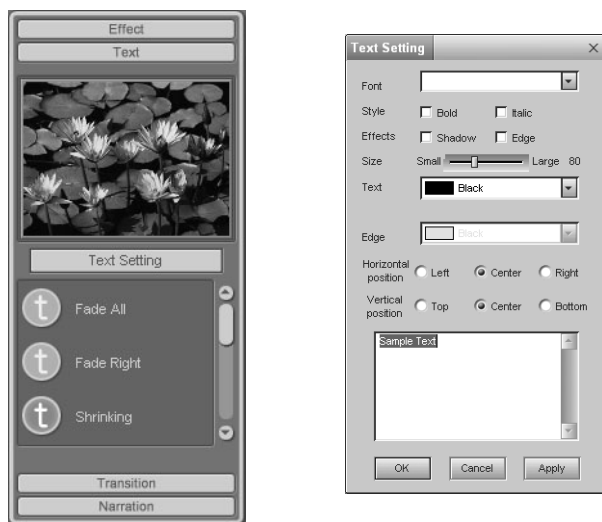
- 3 Drag the Effect icon you want to add from the Effect tray to the Effect palette on the Edit tray.
- 4 Click the Play button on the Edit tray to preview the effect. The added effect previews on the clip displayed in the Effect tray window.

 A preview of the added effect is displayed in the Effect tray window. You can eliminate an effect by dragging it from the Effect palette to the trash icon on the Edit tray. See the online Help file for more information on adjusting effect duration and replaying clips and scenes.


Adding text effects to a scene or clip

- 1 Double-click or drag the clip or scene to move it to the Story Board tray.
- 2 Click the Text button on the Editing tray.

Effects Tray (Text button selected)



- 3 Click the Text Setting button to create customized text. The Text Setting dialog box appears. Enter your text, and select the font, size, color, and positioning for your text.
- 4 Drag the Text effect icon you want to add from the Effect tray to the Effect palette on the Edit tray.
- 5 Click the Play button on the Edit tray to preview the text effect. The clip displays the text effect in the Effect tray window.

 A preview of the added text and text effect is displayed in the Effects tray window. From the Edit tray, you can eliminate a text effect by dragging it from the Effect palette to the trash icon. See the online Help file for more information on adjusting Text effects.

Saving a movie

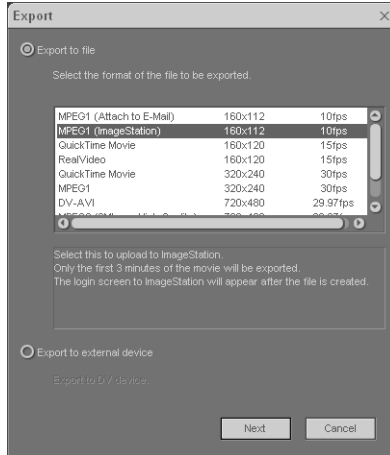
- 1 Verify that the movie or clips you want to save are located on the Story Board tray.
- 2 Click the Export button on the Story Board tray.

Change text in this variable definition to document title.


- 3 Select the format in which you want the movie to be saved.

 You can click on each export format to view its description and use.

Export window



- 4 Click Next.
- 5 Confirm that you want to continue.
- 6 Locate the folder to which you want to save the file, name your file, and click Save.


 The time required to export your movie file may vary, depending on the format selected. See the online Help file for more information on exporting a movie.

Using ImageStation online service with MovieShaker software

ImageStationSM is an online service that allows you to store your pictures and movies on the Internet to share with family and friends. ImageStation requires an Internet connection and registration for the Web-based service. You must be connected to the Internet before uploading your pictures or movies using MovieShaker and ImageStation applications.

To upload MovieShaker files

- 1 Locate the clips or video files that you want to upload to the ImageStation service, and import them to the Import Clip tray.
- 2 Drag the desired clips or video files to the Story Board tray.
- 3 Click the Export button. The Export window appears.
- 4 Select “MPEG1 (ImageStation)” and click Next.

 The MovieShaker application creates a temporary file to store your images prior to uploading to ImageStation. This file is deleted after the upload process.

- 5 If you are a registered member, provide your login name and password.
For first-time users, click “Register to ImageStation.” The ImageStation registration wizard appears and guides you through the initial registration process. Follow the on-screen instructions.

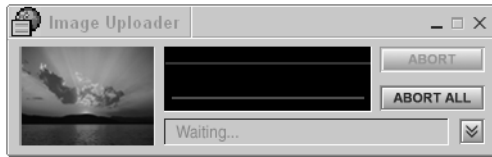
ImageStation Login window




- 6 When the ImageStation application on your computer connects with ImageStation online, your files are uploaded to the Web site. The Image Uploader window appears and displays the Internet connection and upload status.

Change text in this variable definition to document title.

Image Uploader window



- 7 Go to <http://www.imagestation.com> to view your uploaded pictures or movies. Follow the on-screen instructions to access your ImageStation account.

 The ImageStation Web site may ask you to complete a full login again if your current session is not active.

PictureGear Software

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

PictureGear main window



Managing your pictures

Use the Collection feature to manage your pictures.

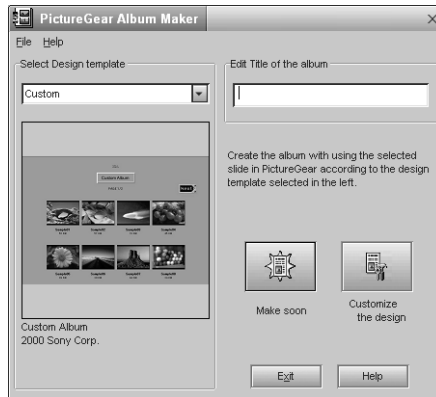
- 1 From the Collection menu, click Create New Collection.
- 2 Enter a name for your collection, then click OK.
- 3 Click the Folder tab in the main window, and browse to locate your pictures.
- 4 Select the pictures you want to include in your collection.
- 5 From the Collection menu, click Add File to Collection.
- 6 In the Add File to My Collection message box, select the name of your collection, and click OK.

Change text in this variable definition to document title.

Creating a photo album

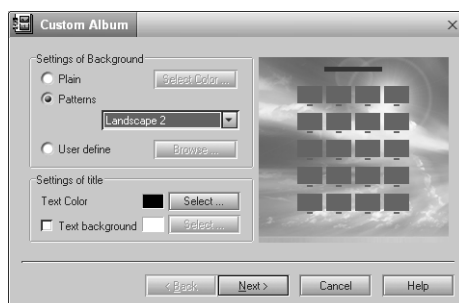
- 1 Click the Folder tab in the main window and browse to locate your pictures.
- 2 Select the pictures you want to include in your album.


PictureGear Album Maker dialog box



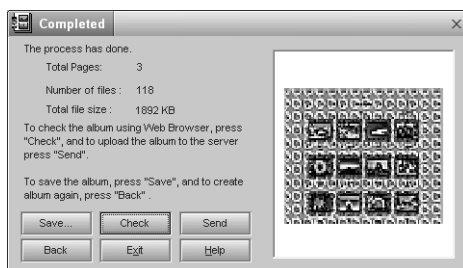
- 3 From the Utilities menu, select Album Maker.
- 4 Choose a Design template for your album.
- 5 Click the “Make soon” button to create your album immediately, using the PictureGear default settings.
- 6 Click the “Customize the design” button to add pictures, frames, text, and effects.

Custom Album dialog box



 If you select the Custom Album process, the final album is created when you click the Finish button in the last dialog box.


Custom album “Completed” dialog box



- 7 Click Save to designate the location where you want to save your album.
- 8 Enter a name for the target folder and click OK.
- 9 The PictureGear™ Custom Album feature creates the new folder in the designated location.

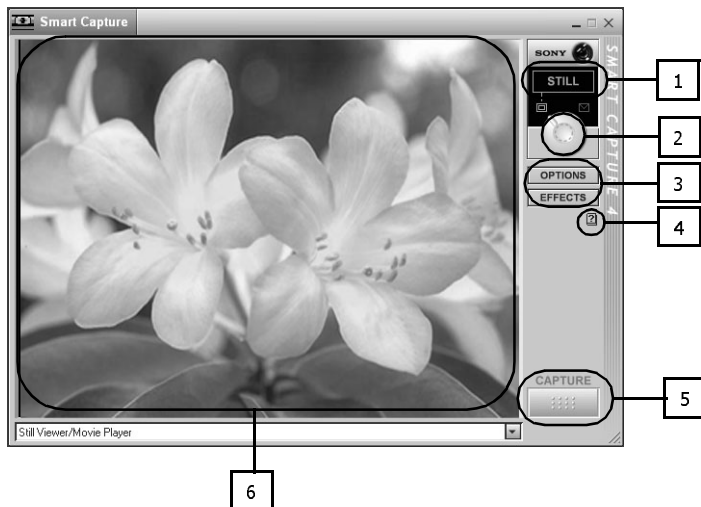
Smart Capture

Smart Capture is a Sony application that manages the i.LINK® connection between your computer and a compatible i.LINK digital camera or camcorder. You can capture and enhance video or still images to share with your family and friends over the Internet or through e-mail.

 i.LINK is a trademark of Sony used only to designate that a product contains an IEEE1394 connection. The i.LINK connection may vary, depending on the software applications, operating system and compatible i.LINK devices. All products with an i.LINK connection may not communicate with each other.

Please refer to the documentation that came with your compatible i.LINK device for information on operating conditions and proper connection. Before connecting compatible i.LINK PC peripherals to your system, such as an optical disc drive or hard disk drive, confirm their operating system compatibility and required operating conditions.

Smart Capture main window



1 Mode indicator Displays the current mode (Still or Net Movie).	4 Help button Connects you directly to the online Smart Capture Help.
2 Mode dial Switches Smart Capture from Still mode to Net Movie mode with a single click of your mouse.	5 Capture button Captures your individual still images in the same manner as a camera. You can select different characteristics for the Capture button when capturing a Net Movie.
3 Options button Displays the configuration options available for either Still or Net Movie mode. Effects button Displays the special effects that you can apply to your pictures or video clips.	6 Image window Displays the still or video image from your digital camera or camcorder.

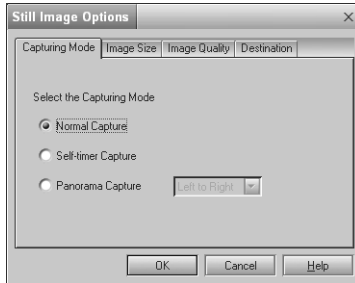
The Smart Capture main window opens with a blue screen image, indicating that there is no data input from a digital camera or camcorder. When you connect your digital camera or camcorder to your system with an i.LINK cable and turn it on, an image appears in the main window. Some cameras and camcorders need to have a recording media inserted before an image can be displayed in the Smart Capture window. Consult the manual supplied with your digital camera or camcorder for more information.

Using Still Mode

- 1** Click Start in the Windows® taskbar and click All Programs.
- 2** Select Smart Capture and then click Smart Capture. The Smart Capture main window appears.
- 3** Connect your compatible i.LINK digital camera or camcorder to your computer with an i.LINK cable (optional). An image appears in the Smart Capture main window.
- 4** Check that the Mode dial is set to Still. Click the Mode dial to switch between Still mode and Net Movie mode.

-
- 5 Click the Options button to view the available options for your still image capture. The Still Image Options window appears.

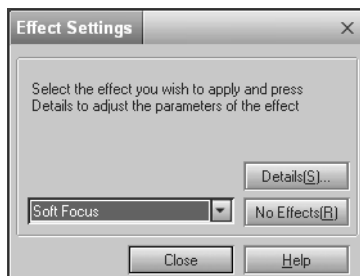
Still Image Options window




The Still Image Options window has four tabs:

- ❑ **Capturing Mode** — You can choose between Normal, Self-timer, or Panorama Capture modes.
 - ❑ **Image Size** — Select the image size, horizontal by vertical, in pixels.
 - ❑ **Image Quality** — Set the quality of your pictures as they are being saved by selecting Fine, Standard, or Economy image quality.
 - ❑ **Destination** — Select a file destination for your pictures.
- 6 Click the Effects button to select a special image effect. The Effect Settings window appears. Use the drop-down list to view and customize the available effects.

Effect Settings window



 You can use a different special effect for each picture, or you can remove all special effects by clicking the No Effects button.

To capture a picture in Still mode

- 1 Use your digital camera or camcorder to locate the image you want to capture. When you see the desired image in the Smart Capture window, click the Capture button. The Still Viewer window appears. You can capture one picture or several pictures at a time.

Still Viewer window



- 2 Click the arrows or drag the scroll bar to view the pictures. As each image is captured, it appears in the Still Viewer window with a text balloon to add your comments and an identifying number in the viewer queue.

To manage pictures in Still mode

From the Still Viewer window, you can perform various functions using the task buttons:

- ❑ **Delete** — Discard any or all of your still images by clicking the Delete button. Select a single image or all and the image(s) is “torn” and removed from the Still Viewer window.
- ❑ **Upload** — Send your still images online to the ImageStation Web site to share with your family and friends. The ImageStation service stores your still images online when you become a registered user. See “Using ImageStation with Smart Capture software”.

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- ❑ **Mail** — E-mail your still images to your family and friends. Click the Mail button and your e-mail application launches with a new message window containing the still image as an attachment.
 - ❑ **Save** — Click the Save button to save your still image in a variety of formats, to a location of your choice.

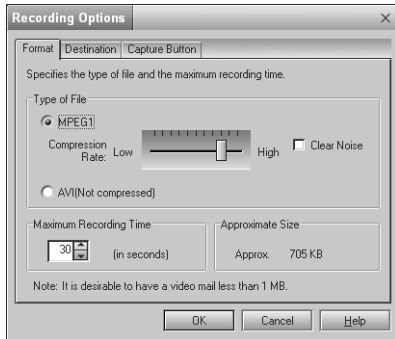


You must be connected to the Internet before attempting to upload or e-mail your still images or videos.

Using Net Movie Mode

- 1 From the Start button in the Windows taskbar, select All Programs, select Smart Capture, and then click Smart Capture. The Smart Capture main window appears.
- 2 Connect your compatible i.LINK digital camcorder to your computer with an i.LINK cable (optional). An image appears in the Smart Capture main window.
- 3 Verify that the Mode dial is set to Net Movie. Click the Mode dial to switch between Still mode and Net Movie mode.
- 4 Click the Options button to view the available options for your movie capture. The Recording Options window appears.

Recording Options window




Format tab view



Capture Button tab view


The Recording Options window has three tabs:

- ❑ **Format** — You can adjust the compression rate for your movies in MPEG1 format or choose the AVI option for no compression. You can also set the maximum recording time for your movie capture.
 - ❑ **Destination** — Select a file destination for your movies when recording video clips.
 - ❑ **Capture Button** — Set the characteristics of the software's on-screen Capture button. You can start and stop recording by clicking the Capture button (this is the default characteristic). You can select Anti-Ground Shooting, which allows recording to occur only while you click and hold the Capture button. Recording will stop when you release the button. (
- 5 Click the Effects button to select a special image effect. The Effect Settings window appears. Use the drop-down list to view and customize the available effects.

 You can remove all special effects by clicking the No Effects button.

To capture a movie in Net Movie mode

- 1 Use your digital camcorder to locate the view(s) you want to capture. When you see the desired view in either the Smart Capture window or your camcorder's viewfinder, click the Capture button to begin recording your movie. The Movie Player window appears.
- 2 Click the Capture button when you have finished recording your movie and the first frame of your movie appears in the Movie Player window. You can record a movie for approximately 30 seconds. The Movie Player feature automatically stops recording when this time limit is reached.

 If you have set the Capture button to use the Anti-Ground setting, you must click and hold the Capture button to record your movie.

Movie Player window



- 3 You can review your movie from the Movie Player window by using the play, pause, and stop buttons. Click the arrows or drag the scroll bar to view your movie. Each frame is displayed with an identifying number in the queue.

To manage your movie in Net Movie mode

From the Movie Player window, you can perform various functions using the task buttons:

- ❑ **Delete** — Discard any frame or the entire movie by clicking the Delete button. The frame or movie is removed from the Movie Player window.
- ❑ **Upload** — Send your movies online to the ImageStation Web site to share with your family and friends. The ImageStation service stores your movies online when you become a registered user. See “Using ImageStation with Smart Capture software”.
- ❑ **Mail** — E-mail your movies to family and friends. Click the Mail button and your e-mail application launches with a new message window containing the movie as an attachment.
- ❑ **Save** — Click the Save button to compress and save your movie in a variety of formats, to a location of your choice.

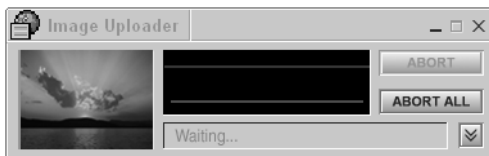
Using ImageStation with Smart Capture software


ImageStationSM is an online service that allows you to store your pictures and movies on the Internet to share with family and friends. The ImageStation service requires an Internet connection and registration for the Web-based service. You must be connected to the Internet before uploading your pictures or movies with Smart Capture and ImageStation applications.


To upload with Movie Player

- 1 Click the Upload Button in Movie Player to begin transfer of your movie to the ImageStation Web site. The Image Uploader window appears and displays the Internet connection and upload status.

Image Uploader window



-
- 2 Click  to see thumbnail previews of your pictures or movies.


 The ImageStation preview feature is available when you upload two or more pictures or a movie. No preview is shown if a single picture is being uploaded.


To upload with Still Viewer

- 1 Click the Upload button in Still Viewer. The ImageStation Login window appears.


ImageStation Login window



- 2 For first-time users, the ImageStation registration wizard guides you through the initial registration process. Follow the on-screen instructions. If you are already a registered member, provide your login name and password. The Image Uploader window appears.
- 3 From the Still Viewer window, click the Upload button to transfer your pictures or movies to the ImageStation Web site. The Image Uploader window displays your Internet connection and upload status. Click  to see thumbnail previews of your pictures or movies.

 The ImageStation preview feature is available when you upload two or more pictures or a movie. No preview is shown if a single picture is being uploaded.

- 4 Go to <http://www.imagestation.com> to view your uploaded pictures or movies. Follow the on-screen instructions to access your ImageStation account. The ImageStation Web site may ask you to complete a full login again, if your current session is not active.

 Sony recommends that your movie file size not exceed 254 MB if compressed, or 2 GB if not compressed. Large movie files take longer to upload to the ImageStation Web site.

SonicStage Software

SonicStage software is a new jukebox application that adds a host of new features to its predecessor, OpenMG™ Jukebox. SonicStage software lets you play and record from audio CDs and import digital audio files while maintaining copyright information. Continuing to take advantage of Sony's copyright-protected ATRAC3™ format for high-quality digital audio storage, SonicStage sports a new music visualizer, a sleek new player skin design, audio CD burning capability, and a parametric equalizer for fine-tuning audio playback.

Electronic Music Distribution (EMD) Services

EMD enables you to download music files via the Internet. To use Internet services that are compatible with SonicStage, you need:

- ❑ Access to the Internet from your computer. Sign up with an Internet Service Provider (ISP) and configure your computer for Internet access before using EMD services.
- ❑ An EMD service provider. Consult the provider for service information.



To protect your personal data, Sony uses Secure Sockets Layer (SSL), an encryption protocol for communication between your browser and Sony's World Wide Web (WWW) server. If you are accessing the Internet from an enterprise Local Area Network (LAN), you may not be able to use SSL due to the proxy server of the LAN. Contact your network administrator for more information.

Starting SonicStage







- 1 Click Start in the Windows taskbar and then click All Programs.
- 2 Select SonicStage and then click SonicStage.



The CDDB® (Compact Disc Database) Music Recognition Service registration wizard enables you to register with CDDB. You need Internet access from your computer to register and use this service. For more information regarding CDDB registration, click the Help button.

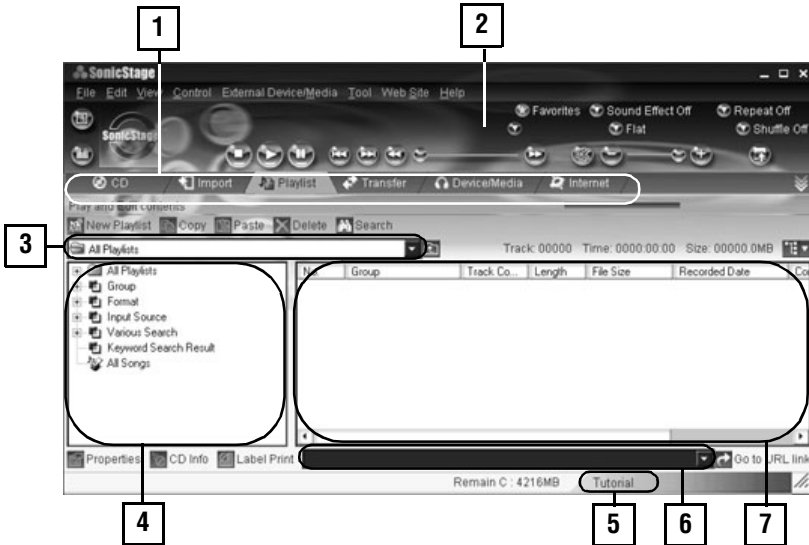
- 3 When you have registered with CDDB, the "Confirm the setup of SonicStage..." dialog box appears.
- 4 Click Yes to continue.


SonicStage feature tabs (Main window)

- ❑ **CD tab**  — The contents of your inserted audio CD are displayed, enabling functions such as recording to the computer's hard disk drive.
- ❑ **Import tab**  — Import MP3, WAV or audio files on your computer to a Playlist.
- ❑ **Playlist tab**  — View the available Playlists as “tree + list” or “list” only.
- ❑ **Transfer tab**  — View the available Playlists on your computer. You can transfer the audio files to an external device or media.
- ❑ **Device/Media tab**  — View the status of your audio files, connected external device, or inserted media.
- ❑ **Internet tab**  — The browser view displays your connection to the Internet, enabling you to locate audio files and use EMD services.

SonicStage main window


Playlist view



1 Feature tabs Changes the screen view according to the selected feature.	5 Tutorial Click to open or close the Tutorial feature.
2 Player control buttons Controls playback functions, such as play, pause, stop, fast forward, and reverse. You can increase or decrease volume and switch view modes.	6 Internet address drop-down list Displays current and recently visited Internet addresses. Click the “Go to URL link” button to immediately connect to your favorite Web sites.
3 Playlist drop-down list (Playlist view) Displays available playlists and audio files.	7 File list view (Playlist view) Displays the contents of the folder selected in the file tree view.
4 File tree view (Playlist view) Displays the folders available on your computer, enabling you to locate your audio files. Expand the views for the file list or Playlist drop-down using the Playlist switch  button.	

Recording from a CD

You can record songs from audio CDs and import them to playlists in SonicStage.

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


- 1 Insert an audio CD into your system’s optical disc drive.
- 2 Click the CD tab.
- 3 Use the drop-down lists to select the ATRAC3 bit rate, CD drive, and Record To destination.


Change text in this variable definition to document title.


CD tab window



- 4 You can identify specific tracks on your CD by clearing the check marks from the tracks you don't want to record. You can clear all selected tracks by selecting the empty checkbox next to Select All, and then selecting the tracks you want to record.

If your Internet connection is active, you can use the  CD Info button to view the name of your CD and its song titles.

 The CD Info button feature is not supported for all audio CDs.

- 5 Click  (Rec to Jukebox) to begin recording. When the recording is finished, the new playlist appears in the File tree view of the Playlist window.

Transferring songs (Check-In/Check-Out)

You can transfer songs between the playlists in the SonicStage software and external devices or media. For more information on using your external devices or media, see the instructions supplied with the device or media.


These instructions are for using the Check-In/Check-Out “1-step” method. For information on using another method, see “Changing the check-in/check-out settings” in the SonicStage online Help file.



Check-Out

- 1 Connect the external device or insert the media into your computer.
- 2 Click the Transfer tab to display the Transfer window. Your computer automatically recognizes the connected external device or media and lists the content information in a new panel on the right side of the Transfer window.


Transfer window







- 3 Select the Playlist that contains the song that you want to check out. The songs in the playlist are shown in the Playlist view panel located in the center of the Transfer window.
- 4 From the Playlist view panel, select the song to be checked out. To check out more than one song at a time, hold down the Ctrl key and select the additional songs.
- 5 Click  (Out), or drag the song to the desired position in the song list of the external device or media. Check Out begins.

 To cancel Check Out, click  (Stop), or click Cancel in the Processing dialog box that is displayed during the Check Out process.

Check In

 The songs that you transfer to external devices or media can only be checked in to the hard drive of the same computer from which the songs were checked out.

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

 To cancel Check In, click  (Stop), or click Cancel in the Processing dialog box that is displayed during the Check Out process.

For more information about using SonicStage software, go to the online SonicStage Help. You can access the online help file as follows:

- 1 Click the Start button in the Windows taskbar, select All Programs.
- 2 Select SonicStage, then select SonicStage Help.

Additional features


- ❑ **SonicStage Tutorial** — SonicStage features are described in the Tutorial. The user-friendly interface instructs you on how to use all SonicStage features.
- ❑ **SonicStage Backup Tool** — You can back up and restore music, graphics, and information data managed by SonicStage. You must be connected to the Internet to use the SonicStage Backup Tool.
- ❑ **Import audio files in various formats** — You can import audio files in various formats, such as MP3 or WAV standards. You can also import audio

files that comply with the Microsoft® Windows Media™ Technologies (WMT) standard, identified by .asf or .wma extensions. Manage your audio files through the Playlist feature of SonicStage.


- ❑ **Manage imported songs on the Playlist** — Additional features are available when you register your imported songs through the Playlist feature of SonicStage. You can manage your music by creating your own list of songs categorized by genre or artist, displaying your song list in the Playlist feature, and arranging your songs in a customized order using the Playlist folders. Edit your music by combining multiple songs into a single song, or divide one song into two, by using the Combine and Divide features.
- ❑ **Simple mode** — The main SonicStage window viewed in Simple mode, is a smaller, compact version of Full mode. This may be convenient when you want to listen to music with SonicStage software, while using other applications, or whenever you feel the Full mode view is intrusive. The design of the main SonicStage window in simple mode can be changed by selecting a new “Skin,” which enhances the window’s appearance. The Simple mode feature enables you to perform playback operations only.

SonicStage Premium Software

SonicStage™ Premium software is a unique integrated software application that supports high quality digital audio playback and recording using the MiniDisc drive, FM tuner, or DVD-RW drive of your VAIO® MX computer. You can easily record your favorite music from external analog and digital audio devices, such as a CD player. SonicStage Premium software has several jukebox features, including a music Visualizer, audio CD-burning capability, and an equalizer for fine-tuning your audio playback.*

 SonicStage™ Premium software is available only on VAIO® MX computer models."


Overview of SonicStage Premium Software

SonicStage Premium software has unique features that integrate with your MiniDisc drive, FM tuner and DVD-RW drive. The features expand the compatibility of the built-in audio devices, enabling you to create your own music database  (M drive) and share audio files using other audio media and devices.

SonicStage Premium software enables you to play and record audio CDs and import digital audio files while maintaining the copyright information of the contents.

When you record an audio CD, it is encoded in ATRAC3 format onto your computer's hard disk drive. You can also download (import) digital audio files from Electronic Music Distribution (EMD) services. The imported data can be played on your computer or transferred to external portable audio devices or media. SonicStage Premium software converts your existing MP3 and WAV format audio files into ATRAC3 format.

* Your VAIO® MX computer has SonicStage™ Premium software preinstalled. Some manuals or online help files may provide information about SonicStage™ software, which is a lighter version with fewer features. Follow the information provided in this guide or in the SonicStage Premium online Help file, to learn how to use SonicStage Premium software.

 You have the option of formatting your audio files in ATRAC3, MP3 or WAV formats. See the SonicStage Premium Help file for more information.

SonicStage Premium software features

The software features enable you to:

- ☐ Listen to music from different audio sources, such as FM radio stations, audio CDs, or an Electronic Music Distribution (EMD) service.
- ☐ Import your songs from various audio sources and create your own music database.
- ☐ Manage information about your audio files, such as the artist name, song title, and media jacket image, by grouping into Playlists.
- ☐ Use search criteria to locate specific songs in your music database.
- ☐ Create custom CDs by selecting songs from different audio CDs or transferring songs from your music database.
- ☐ Transfer the imported songs in your music database to a MiniDisc, MagicGate™ Memory Stick® media, or other external device or media.
- ☐ Use SonicStage Premium software's sound effects, equalizer, or visualizer, to enhance your listening experience.
- ☐ Set up timed events using Timer Playback, Timer Recording, and Sleep Timer.

For more information about SonicStage Premium software features, follow these steps to access the SonicStage Premium Help file:

- 1 Click Start in the Windows® taskbar and select All Programs.
- 2 Select SonicStage Premium and click SonicStage Premium Help.

SonicStage Premium software compatibility

The software is compatible with several media, devices, and types of audio files. You can play back, listen to, and record, with the following:

Media

- ☐ **Audio CDs (Including CD Extra and CD Text)** — You can play back, record to the hard disk drive, and make backup CDs.


- ❑ **MiniDiscs** — You can play back MiniDiscs that are recorded in LP stereo, stereo and mono recording modes. The M drive enables recording (check-out) to MiniDisc media.
- ❑ **MagicGate™ Memory Stick® media*** — You can play back songs from the media, using the Memory Stick slot on your computer. The M drive enables recording (check-out) to MagicGate Memory Stick media.

Devices

- ❑ **FM Tuner** — Your VAIO® MX computer features a built-in FM tuner, enabling you to listen to and record from FM stations. Your recorded material is converted into OpenMG format or WAV format.
- ❑ **Devices that are compliant with OpenMG technology standards** — The USB ports on your computer enable you to connect a compatible device that can play and record your audio files.
- ❑ **Devices that are connected to the computer's external input ports or jacks** — You can listen to and record from a connected device.

Audio file formats

- ❑ OpenMG format: ATRAC3 files with the file extension .omg.
- ❑ WAV format
- ❑ MP3 format
- ❑ Audio files that are compliant with WMT (Windows® Media Technology).

 Some MP3, WAV and WMT compliant files may have incompatible sampling rates and cannot be imported. For details on importing files, see the SonicStage Premium Help file.

Electronic Music Distribution (EMD) Services

EMD enables you to download music files via the Internet. To use Internet services that are compatible with SonicStage, you need:


- ❑ Access to the Internet from your computer. Sign up with an Internet Service Provider (ISP) and configure your computer for Internet access before using EMD services.

* SonicStage Premium software does not support standard Memory Stick media (blue color).

- ❑ An EMD service provider. Consult the provider for information about service.

To Use SonicStage Premium Software

When you start SonicStage Premium software for the first time, certain settings must be enabled in order to use the software to listen to FM radio stations and to play audio files.

 Connect the FM Tuner before attempting to scan the frequencies of available FM radio stations in the SonicStage Premium software application.

Starting SonicStage Premium Software (First time)

- 1 Click Start in the Windows taskbar and select All Programs.
- 2 Point to SonicStage Premium and then click SonicStage Premium.
- 3 At the first use of SonicStage Premium software, a dialog box appears and prompts you to register with the Compact Disc Database (CDDDB) music service. From this dialog box, you can choose to:
 - ❑ Click Cancel and end the CDDDB registration process for the current session. The CDDDB registration dialog box displays the next time you start SonicStage Premium software.
 - ❑ Create a new CDDDB account. If you are connected to the Internet before launching SonicStage Premium software, follow these steps:
 - 1 Select “This is a new CDDDB Registration.” Click Next.
 - 2 Follow the on-screen instructions to complete the registration process.
 - ❑ Access your existing CDDDB account. If you are connected to the Internet before launching SonicStage Premium software, follow these steps:
 - 1 Select “I already have a CDDDB Nickname.” Click Next.
 - 2 Follow the on-screen instructions to log on and access your existing account.

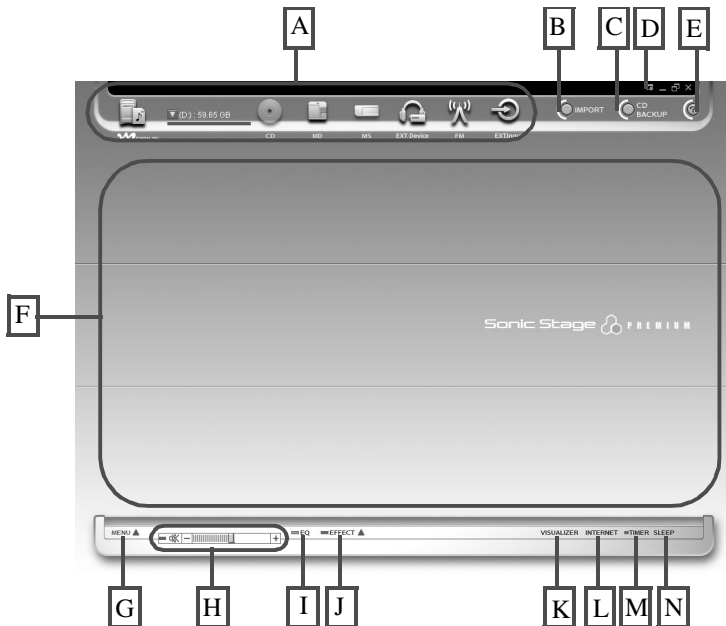
The SonicStage Premium main window appears, enabling you to continue your launch of the SonicStage Premium software.

- 1 In the software's main window, a dialog box appears. You are prompted to start scanning FM radio station frequencies. Click Yes.

Your computer starts scanning and displays a progress window.

- 2 A dialog box appears with the message, "Confirm the setup of SonicStage Premium." From this dialog box, you can choose to:
 - ☐ Set up SonicStage Premium software to automatically launch when you double-click audio files.
 - ☐ Select the type of audio files that can be played back with SonicStage Premium software.
 - ☐ Confirm playback settings each time SonicStage Premium software is launched.

SonicStage Premium main window



-
- | | |
|----------|------------------------------------------------------------|
| A | Audio source icons
Identifies the audio sources. |
|----------|------------------------------------------------------------|
-
- | | |
|----------|-----------------------------------------------------|
| B | IMPORT button
Displays the Import window. |
|----------|-----------------------------------------------------|
-
- | | |
|----------|------------------------------------------------------------------|
| C | CD BACKUP button
Displays the Create Audio CDs window. |
|----------|------------------------------------------------------------------|
-
- | | |
|----------|--------------------------------------------------------------------------------------------|
| D | Simple Mode Switch button
Switches the main window view to the simple mode view. |
|----------|--------------------------------------------------------------------------------------------|
-
- | | |
|----------|------------------------------------------------------------------|
| E | Help button
Displays the SonicStage Premium Help file. |
|----------|------------------------------------------------------------------|
-
- | | |
|----------|-------------------------------------------------------------------------------|
| F | Operation area
Displays the operation panels for the audio sources. |
|----------|-------------------------------------------------------------------------------|
-
- | | |
|----------|-----------------------------------------------|
| G | MENU button
Displays the main menu. |
|----------|-----------------------------------------------|
-
- | | |
|----------|---------------------------------------------------------------------------------------------------------------|
| H | Volume Control button
Increase or decrease sound volume when playing back songs from audio sources. |
|----------|---------------------------------------------------------------------------------------------------------------|
-
- | | |
|----------|----------------------------------------------------------------------------------------------------------------|
| I | Equalizer button
Displays the MX Equalizer dialog box, enabling you to change the equalizer options. |
|----------|----------------------------------------------------------------------------------------------------------------|
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- | | |
|----------|---------------------------------------------------------------------------------------|
| J | Sound Effect button
Enables or disables the current sound effect selection. |
|----------|---------------------------------------------------------------------------------------|
-
- | | |
|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| K | Visualizer button
Minimizes or maximizes the Visualizer window. The Visualizer window offers various images that respond to music playback. |
|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
-

L Internet button

Minimizes or maximizes the Internet connection window. The Internet window enables you to download or listen to audio files from EMD services.

M Timer Set button

Minimizes or maximizes the Timer Setting window. The Timer Setting window enables you to set up timed playback or recording events.

N Sleep Timer button

Your computer can be set up to automatically enter Stand by mode using the Sleep Timer button.

Using the audio source icons

The audio source icons initiate the functions of SonicStage Premium software for the related audio media or device. You can play back or record music using a drag-and-drop or double-clicking operation.

- ☐ Click on an audio source icon to view a Playback panel.
- ☐ Double-click on an audio source icon to begin music playback.
- ☐ Right-click on an audio source icon to view a shortcut menu of available functions.
- ☐ Drag an audio source icon onto another to perform recording or check-in/check-out functions.

Icon	Description
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Audio source is the **M DRIVE** (music database) on your hard disk drive. The Playlist icon also identifies audio files that are registered to a specific playlist in the M drive.



Audio source is a CD, CD-R or CD-RW inserted into your computer's optical drive.



Audio source is a MiniDisc inserted into your computer's MiniDisc drive.

Icon	Description
	Audio source is a MagicGate  Memory Stick media inserted into your computer's Memory Stick slot. (Note: A standard Memory Stick media (blue color) is not compatible with SonicStage Premium software.)
	Audio source is an external device or media connected to the USB port on your computer.
	Audio source is your computer's built-in FM tuner.
	Audio source is for recording purposes. This icon identifies a device connected to the external input port or jack on your computer, such as the LINE IN, OPT IN, or MIC.

Using the basic operations

The functions and operation of each audio source is controlled through three windows:

- ❑ **Playback Panel** — This window enables you to play songs from the selected audio source. You can control the music by using functions such as repeat, shuffle, fast forward and rewind. The available functions on the Playback panel may vary, depending on the selected audio source icon.
- ❑ **Contents Panel** — This window displays a list of songs from the audio source or from a Playlist. You can also view information about the song, such as the artist name, song title, or duration of playback.
- ❑ **Edit Panel** — This window enables editing of the songs from the audio source. You can rearrange song order or add/delete songs from the audio source or Playlist.





If you select the FM tuner or external device icons, a Listening panel is displayed. The functions of the Listening panel differ from the Playback panel. See the SonicStage Premium Help file for more information.



To Use Playback and Recording Features


Playing an audio CD




When you play an audio CD in your computer's optical drive for the first time, you are prompted to select playback options and to check the operation of the drive. Follow the instructions in the dialog boxes, and set up SonicStage Premium software to automatically play your audio CDs and to verify the optical drive operation.

- 1 Insert the audio CD into the optical drive. The CD Playback panel appears.

 If the Playback panel does not automatically display, click the  icon. You can double-click the icon to automatically start playback of the audio CD.

- 2 Click  (Play) on the Playback panel to begin playback from the beginning of the audio CD.
- 3 Click  (Show List) on the Playback panel to view the Contents panel. A song list of the music on the audio CD is displayed.
- 4 Select the song you wish to play. Click Play on the Playback panel to begin the selected song.

 You can double-click on a specific song to automatically begin playback.

- 5 Click  (Stop) on the Playback panel to stop playback.
- 6 Click  (Play) during playback to pause the song. Click on the icon again to resume playback.
- 7 Click  (Eject) on the Playback panel to eject the audio CD from the drive.

 The Timer Playback and Sleep Timer functions are disabled during song playback.






Do not open or close the optical drive during playback.


Recording an audio CD

You can record songs from an audio CD and register them to a Playlist on your hard disk drive.


To record all songs on an audio CD

- 1 Insert the audio CD into the optical drive. The CD Playback panel appears.
- 2 Select and drag  (CD), and drop it on  (M drive). The Record window appears.
- 3 Click Show List on the Record window. The songs on the audio CD are listed in the List panel. You can click  (CD Info) to view information about the songs on your CD if you are connected to the Internet.
- 4 Select the format and bit rate for your recording session. Click Record All to begin recording all the songs on the CD.

To record specific songs on an audio CD

- 1 Follow steps 1-3 as described in the previous section.
- 2 From the List panel, use a check mark to select the songs you want to record. Delete the check marks from those songs you do not wish to record.
- 3 Select the format and bit rate for your recording session. Click  (record) to begin recording the selected songs.

Playing songs on your hard disk drive (Playlist)

- 1 Click  (M drive). The Playlist Playback panel appears.
- 2 Click Show List on the Playback panel to view the Contents panel. The Playlists on your hard disk drive are displayed.


You can find a specific Playlist using the categories function. Search for the desired Playlist by artist name, genre, or keywords.

- 3 Double-click to select a Playlist.
- 4 Double-click on a song to begin playback.

Playing a MiniDisc

- 1 Insert the MiniDisc into the MiniDisc drive. The MiniDisc Playback panel appears.



If the Playback panel does not automatically display, click the  (MiniDisc audio source) icon. You can double-click the icon to automatically start playback of the MiniDisc.

- 2 Click Play on the Playback panel to begin playback from the beginning of the MiniDisc.
- 3 Click Show List on the Playback panel to view the Contents panel. A song list of the music on the MiniDisc is displayed.
- 4 Select the song you wish to play. Click Play on the Playback panel to begin the selected song.
- 5 Click Stop on the Playback panel to stop playback.
- 6 Click Play during playback to pause the song. Click on the icon again to resume playback.
- 7 Click Eject on the Playback panel to eject the MiniDisc from the drive.



Do not eject the MiniDisc media during playback.



Recording songs to a MiniDisc (Check-out)



When you record songs from an audio CD to a MiniDisc, the songs are recorded into a Playlist on your hard disk drive, and then checked out to the MiniDisc.



Before recording to a MiniDisc, verify that the media is not write-protected.


To record songs to a MiniDisc

- 1 Insert the audio CD into the optical drive.
- 2 Insert the MiniDisc media into the MiniDisc drive.
- 3 Select and drag  (CD), and drop it on  (MiniDisc). The Record window appears.



- 4 Click Show List on the Record window. The songs on the audio CD are listed in the List panel. You can click the CD Info button to view information about the songs on your CD if you are connected to the Internet.
- 5 Select the format and bit rate for your recording session.
- 6 Click . The MD Recording Mode dialog box appears. Choose the appropriate recording mode, depending on format and bit rate selected previously. For details on setting the format and bit rate, see the SonicStage Premium Help file.
 - ☐ LP2 Stereo Recording mode
 - ☐ LP4 Stereo Recording mode
 - ☐ Stereo Recording mode
 - ☐ Mono Recording mode
- 7 Select the recording (check-out) mode. Click OK.
- 8 Click  (Stop Record) to stop or cancel the recording session.

 For more information on recording to a MiniDisc (Check-out), see the SonicStage Premium Help file.

Playing songs from a MagicGate Memory Stick media

- 1 Click  (MagicGate™ Memory Stick® media) audio source icon. The Memory Stick media Playback panel appears.

The Check-in/Check-out window appears if the Memory Stick media is inserted while SonicStage Premium software is running. You can play songs by using the Playback panel on the right side of this window.






 If the Playback panel does not automatically display, click the  icon with the Memory Stick media inserted into the Memory Stick slot of your computer. You can double-click the icon to automatically start playback of the Memory Stick media.

- 2 Click Show List on the Playback panel to view the Contents panel. A song list of the music on the Memory Stick media is displayed.
- 3 Select the song you wish to play.
- 4 Click Play on the Playback panel to start the selected song.

Recording songs to a Memory Stick media or portable audio device (Check-out)

You can record songs from an audio CD to a MagicGate™ Memory Stick® media or external device that is compliant with OpenMG™ software standards. The songs are recorded to the M drive on your hard disk drive, and then checked out to the Memory Stick media or portable audio device.

 Before recording to a Memory Stick media, verify that the media is not write-protected.

- 1 Insert the audio CD into the optical drive.
- 2 Insert the Memory Stick media into the Memory Stick media slot, or connect the external device to the computer.
- 3 Select and drag  (CD), and drop it on  (Memory Stick media), or  (external device or media). The Record window appears.
- 4 Click Show List on the Record window. The songs on the audio CD are listed in the List panel. You can click CD Info to view information about the songs on your CD if you are connected to the Internet.
- 5 Select the format and bit rate for your recording session. For details on setting the format and bit rate, see the SonicStage Premium Help file.
- 6 Click  (Record). The recording session starts.
- 7 Click  (Stop Record) to stop or cancel the recording session.

Playing songs from a portable audio device

SonicStage™ Premium software is preinstalled in your computer and is designed to be immediately compatible with most portable audio devices. If your portable audio devices use OpenMG™ software, you must set up and configure each device before using it with SonicStage Premium software. Follow these steps to install your OpenMG software and configure a device:


- 1 Insert the OpenMG software CD supplied with your audio device.
- 2 When you are prompted to select installation options, select the option to install drivers only.
- 3 Select the driver option that corresponds with the model name and number of your audio device. Click Install.

- 4 Follow the onscreen instructions to complete the driver installation.
- 5 Restart your computer when prompted.
- 6 Connect your audio device to a USB port on your computer and wait for Windows® to detect it. (A message may display in the Windows task tray.)


Open SonicStage Premium software, as follows:

- 1 Click Start in the Windows taskbar and select All Programs.
- 2 Point to SonicStage Premium and then click SonicStage Premium. The SonicStage Premium main window appears.



Your audio device is configured for use with SonicStage Premium software.

 Earlier versions of OpenMG Jukebox software (version 2.1 or earlier) are not compatible with SonicStage Premium software. If you have difficulty installing your portable audio device, go to the manufacturer's support Web site to locate and download the latest drivers.

To play songs from an portable audio (external) device or media

- 1 Click  (External device or media). The External device Playback panel appears.

The Check-in/Check-out window appears if the external device or media is connected or inserted while SonicStage Premium is running. You can play songs by using the Playback panel on the right side of this window.

 If the Playback panel does not automatically display, click the  icon with the external device/media connected or inserted into your computer. You can double-click the icon to automatically start playback of the songs on the device or media.


- 2 Click Show List on the Playback panel to view the Contents panel. A song list of the music on the external device or media is displayed.
- 3 Select the song you wish to play. Click Play on the Playback panel to start the selected song.

 You may not be able to play back songs on the audio device or media that were checked out from a different computer.

To Use the Visualizer, Equalizer, and Sound Effects

Your VAIO® MX computer has special features to enhance your music experience. You can view synchronized images while listening to music, enhance the sound quality and add special effects to your favorite songs.


Using the Visualizer

- 1 Click . The Visualizer window appears.
- 2 Click the Options button and point to Select Visualizer. The images on the Visualizer window change, enabling you to select your preference.
- 3 Click the Full Screen button or double-click anywhere on the Visualizer window to view the images in full-screen mode. You can restore the original window size by pressing the Esc key or double-clicking anywhere on the Visualizer window.
- 4 Click Visualizer again to close the Visualizer window.



The movements of Visualizer images do not synchronize with songs that are on a MiniDisc.


Using the MX Equalizer

- 1 Click . The MX Equalizer window appears. Select the desired sound mode from the drop-down list.


Sound Mode	Description
Flat	Equalizes the gain in each frequency range. Use this mode if you do not want to apply equalization during playback.
Pop	Selects the settings that are most suitable for Pop music.
Rock	Selects the settings that are most suitable for Rock music.
Jazz	Selects the settings that are most suitable for Jazz music.
Classic	Selects the settings that are most suitable for Classical music.
User1/User2	Selects your customized equalizer settings. See “To use custom equalizer settings”.

- 2 Click Close. The next time you play a song, the selected sound mode is applied to the song.

To use custom equalizer settings

- 1 Click  . The MX Equalizer Editor dialog box appears.
- 2 Select User1 or User2, and click Edit.
- 3 Set your desired adjustments to the Center frequency, Q-value and gain, by using the sliders.
- 4 Set the Bass Boost, as desired, by selecting the On option of the Bass boost. Move the slider to adjust levels.
- 5 Set the Treble, as desired, by selecting the On option of the Treble. Move the slider to adjust levels.
- 6 Click OK. The MX Equalizer Editor dialog box closes and the settings are registered for User1 or User2, depending on your selection.
- 7 Click OK. The MX Equalizer window closes.

Using sound effect settings

- 1 Click  . A sound effects menu displays.
- 2 Select the desired sound effect from the menu.



You may hear distortion during playback of some songs when sound effects have been added. If this occurs, select "Sound Effect Off" to turn off the sound effect.

<i>Effect</i>	<i>Description</i>
Vocal Canceller	Reduce or cancel the vocals in a song. You can also change the pitch of a song.
Reverb	Add reverberation to the sound, emulating different sound fields.
Settings	Make fine adjustments to each sound effect. See the SonicStage Premium Help file for more information on adjusting sound effects.

- 3 Click Close. The next time you play a song, the selected sound effect is applied to the song.

 You cannot apply sound effects to songs on a MiniDisc, audio from an FM radio station, or music from an external output.

To Use the FM Tuner


Your VAIO® MX computer is equipped with a built-in FM tuner, enabling you to listen to and record from FM radio stations. Your FM antenna wire or FM coaxial antenna (supplied) must be connected to your computer before you can listen to FM radio stations.


Listening to FM radio stations

The first time that you use your FM tuner, you are prompted to start automatic frequency scanning.



- 1 At the first use of SonicStage Premium software, a dialog box appears and prompts you to start scanning frequencies of FM radio stations. Click Yes.

Your computer starts scanning and displays a progress window. After scanning is complete, the frequencies of available FM radio stations are sorted in ascending order and assigned a sequential number on the Preset panel.

 Subsequent scanning overwrites the FM radio stations listed on the Preset panel. If you wish to keep the current list of FM radio stations, select “No” when the scanning dialog box appears.

- 2 Click . The FM Listening panel displays. The computer tunes in to the preset FM radio station that is currently selected.
- 3 You can use preset or manual tuning to change FM radio stations:

- ☐ To use preset tuning, click  (FM Menu) and select Tuning Mode - Preset from the menu.
- ☐ To use manual tuning, click FM Menu and select Tuning Mode - Manual from the menu.


Click  or  on the FM Listening panel to locate a specific station or


frequency.


For more information on selecting FM radio stations, see the SonicStage Premium Help file.

Recording from an FM radio station

You can record from an FM radio station and register the audio file to a Playlist on your hard drive.

- 1 Click . The FM Listening panel appears.
- 2 Select the desired FM radio station.
- 3 Set up your audio input and recording settings by clicking REC Setting. Your audio input and recording options are:
 - ☐ Noise Reduction: Enable or disable noise reductions during recording.
 - ☐ Time Machine Recording: Set up a timer recording session.
 - ☐ Recording Format: Specify the desired recording file format.
 - ☐ Edit FM Playlist: Set up a Playlist to hold your recording session as a song.


 The maximum recording time is 150 minutes, regardless of format or bit rate settings. File size may vary, depending on audio input, recording format, or bit rate.

- 4 Move the Level Adjust slider to adjust the audio input level, if necessary.
- 5 Click  on the FM Listening panel to begin recording.
- 6 Click STOP on the FM Listening panel to stop recording. The recording session is registered to a Playlist as a song.

 You cannot change FM radio stations during a recording session.


To use Quick Timer Recording

To quickly set the amount time remaining to record:

- 1 Click  on the FM Listening panel during the recording session, to automatically set the recording time to 10 minutes.
- 2 Continue clicking on the icon to extend the recording duration by 10 minute increments.

To Use the Timer Functions


You can use the timer functions to schedule one-time, daily, and weekly playback or recording events. SonicStage Premium enables you to select the date, start time, end time, and timer event duration for the available audio sources.


 Timer events can only be performed when your computer's power is on, such as during active use, Stand by, or hibernation modes.

You cannot set up timer events for external devices or media.

Setting up a timer event

You can set up a timer event by dragging an audio source icon directly onto the Calendar.

- 1 Click  (Timer). The Timer Setting window appears.
- 2 Use the directional icons to locate the start date for your timer event.
- 3 Drag the desired audio source icon to the Calendar and drop it on the date you want the timer event to begin. A confirmation message appears.
- 4 Click OK.

 If you use the M drive audio source icon, the Select Playlist dialog box displays. Select the Playlist for the timer event and click OK.

A Timer Bar (a thick, vertical line) appears in the Calendar, marking the duration of the timer event, and the event is added to the Event List on the Timer Setting window.

- 5 Adjust the start, end, and duration of the timer event by dragging either side of the Timer Bar to the desired location.

To move the Timer Bar to a new location, click on the center of the bar and drag it to a new time period.

The timer event setup is completed. At the scheduled time, SonicStage™ Premium software automatically starts the event from the selected audio source.

To set up daily or weekly timer events

- 1 From the Timer Setting window, click New. The Timer Programming Settings window appears.
- 2 Set the date, time, audio source, and repetition of the timer event. Click OK.

The daily or weekly timer event setup is completed. At every scheduled time, SonicStage Premium software automatically starts the event from the selected audio source.

 You can display the Timer Programming Setting window by double-clicking anywhere on the Calendar that does not have a Timer Bar displayed.

Setting the Sleep Timer

The Sleep Timer function places your computer into Stand by mode after a predetermined period of time.

- 1 Click **SLEEP** (Sleep). The default Sleep Timer duration is 90 minutes. When the timer countdown is completed, the computer goes into Stand by mode.
- 2 Click the Sleep button to decrease the countdown duration by 10-minute increments.

Additional information about Timer events

If you perform any of the following operations when a timer event is set to begin, the scheduled event does not occur:

- ☐ Playing back songs or listening to audio from any audio source.
- ☐ Recording songs from an audio CD to a Playlist.
- ☐ Creating a backup audio CD.
- ☐ Writing songs from a Playlist to a CD-R media.
- ☐ Performing a check-in or check-out of songs.
- ☐ Importing audio files.
- ☐ Leaving the computer turned off.

When you attempt to change a timer event, the following aspects cannot be altered:

- ❑ The date, time, and duration of a completed or incomplete timer event.
- ❑ The date, time, and duration of a timer event in progress or about to start within three minutes. You can change the ending time if it is at least five minutes before the scheduled end time.
- ❑ The day of the week that a weekly timer event is scheduled to start. Use the Timer Programming Settings dialog box to change this information.

For more information about Timer functions, see the SonicStage Premium software Help file.

Additional Information

- ❑ **SonicStage™ Premium Backup Tool** — You can back up and restore all of the music, graphics and information data managed by SonicStage Premium software. You must be connected to the Internet to use the SonicStage Premium Backup Tool.
- ❑ **Simple mode** — The main SonicStage Premium window in Simple mode is a smaller, compact version of the Full mode view. This can be useful when you want to listen to songs with SonicStage Premium software while using other software, or whenever you feel that Full mode view is intrusive. The Simple mode feature enables you to perform playback operations only.

VisualFlow Software

VisualFlow™ software is a Sony state-of-the-art multimedia browser designed specifically for Memory Stick® media. It displays any still picture, movie or sound files stored in a Memory Stick media in a visually pleasing, artistic manner. VisualFlow software plays a selected movie or sound file and enables playback of files by other applications like PictureGear™, PictureToy™, and Memory Stick Slideshow.

Using VisualFlow software

You can navigate in the VisualFlow application by using your mouse, the directional arrows on your keyboard, or the Sony Jog Dial™ control (on those models that offer the Sony Jog Dial™ control).

- 1 Click Start in the Windows taskbar, then select All Programs.
- 2 Select VisualFlow, then click VisualFlow.

VisualFlow main window



- 3 Click an icon in the View section on the main toolbar to select a display layout.

- 4 Click an icon in the Sort section on the main toolbar to select a sorting method.
- 5 Placing your cursor on the left end of the main toolbar activates the current Memory Stick properties.
- 6 Placing your cursor on the right end of the main toolbar activates a secondary toolbar with more functions.
- 7 Click an image to show a normal view centered on the screen.
Double-clicking an image shows an enlarged view.
- 8 The movie file starts playback when the view is enlarged. Click on the movie files again to restore the view to normal.



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

Additional Software Information

VAIO Edit Components

Sony Electronics Inc.

VAIO Edit Components is a software plug-in for Adobe® Premiere® that provides maximum compatibility and video quality for capturing video from your Sony digital camcorder. If your VAIO® computer did not have Adobe® Premiere® software preinstalled and you subsequently purchase and install Adobe® Premiere®, install this software to ensure maximum compatibility with Sony digital camcorders.

VAIO Edit Components Software

VAIO Edit Components is a software plug-in for Adobe® Premiere® that provides maximum compatibility and video quality for capturing video from your Sony digital camcorder. If your VAIO® computer did not have Adobe® Premiere® software preinstalled and you subsequently purchase and install Adobe® Premiere®, install this software to ensure maximum compatibility with Sony digital camcorders.

Installing VAIO Edit Components

- 1 Insert your Driver Recovery CD into your optical drive.
- 2 Click Start, click My Computer, and click your optical drive.
- 3 Click Support, and click VEC.
- 4 Double-click Setup.

The VAIO Edit Components installation wizard starts.

- 5 Follow the on-screen instructions in the installation wizard.
- 6 Restart your computer when prompted to do so.

Troubleshooting

This section describes how to solve common problems you may encounter when using your notebook. Many problems have simple solutions, so try these suggestions before you visit the Sony Computing Support Web site at <http://www.sony.com/pcsupport>.

- ☐ Troubleshooting Your Notebook
- ☐ Troubleshooting the LCD Screen
- ☐ Troubleshooting the Mouse and Touchpad
- ☐ Troubleshooting Drives, PC Cards, and Peripheral Devices
- ☐ Troubleshooting Software
- ☐ Troubleshooting the Modem
- ☐ Troubleshooting Audio
- ☐ Troubleshooting the Printer
- ☐ Troubleshooting Wireless LAN

Troubleshooting Your Notebook


My notebook does not start.

- ❑ Check that the notebook is plugged into a power source and that it is turned on. Check that the power indicator on the front panel of the notebook indicates that the power is on.
- ❑ Check that the battery packs are inserted properly and that they are charged.
- ❑ If you have connected an external, optional floppy disk drive, make sure there is no floppy disk in the floppy disk drive.
- ❑ Confirm that the power cord and all cables are connected firmly. See “Connecting a Power Source” in the printed Quick Start for more information.
- ❑ If you plugged the notebook into a power strip or Uninterruptible Power Supply (UPS), make sure the power strip or UPS is turned on and working.
- ❑ If you are using an external display, check that it is plugged into a power source and turned on. Check that the brightness and contrast controls are adjusted correctly. See the manual that came with the display for details.
- ❑ Condensation may cause the notebook to malfunction. If this occurs, do not use it for at least one hour.
- ❑ Take the battery pack out of the notebook, unplug the power cord, plug it in again, and then turn on the power.

My notebook starts but a BIOS error appears.

- ❑ When the internal backup battery is low on power, it may not start your system properly. The message, “Press <F1> to resume, <F2> to setup” appears at the bottom of the screen. Follow these steps:
 - 1 Press the F2 key. The BIOS Setup menu appears.
 - 2 Set the date (month/day/year). Press the Enter key.
 - 3 Press ↓ to select System Time, then set the time (hour: minute: second). Press the Enter key.
 - 4 Press → to select Exit, then press ↓ to select Get Default Values. The message “Load default values for all SETUP items” appears.
 - 5 Press the Enter key. The Setup Confirmation window appears.

- 6 Select Yes, and press the Enter key.
- 7 Select Exit (Save Changes), then press the Enter key. The Setup Confirmation window appears.
- 8 Select Yes, then press the Enter key. The notebook restarts.

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

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

- ☐ If you have connected an external, optional floppy disk drive, make sure there is no floppy disk in the floppy disk drive (non-bootable).
- ☐ If a non-bootable floppy disk is in a connected floppy disk drive, follow these steps:
 - 1 Turn off the notebook, and then remove the floppy disk.
 - 2 Restart the notebook and confirm that Windows starts properly.
- ☐ If Windows still does not start, follow the steps below to start the BIOS:
 - 1 Turn off the notebook.
 - 2 Remove any peripheral devices connected to the notebook.
 - 3 Turn the notebook on again.
 - 4 Press the F2 key when the Sony logo appears. The BIOS setup menu screen appears.
 - 5 Set the date (month/day/year). Press the Enter key.
 - 6 Press ↓ to select System Time, then set the time (hour: minute: second). Press the Enter key.
 - 7 Press → to select Exit, then press ↓ to select Get Default Values. The message “Load default values for all SETUP items” appears.
 - 8 Press the Enter key. The Setup Confirmation window appears.
 - 9 Select Yes, and press the Enter key.
 - 10 Select Exit (Save Changes), then press the Enter key. The Setup Confirmation window appears.

- 11 Select Yes, then press the Enter key. The notebook restarts.

If your notebook continues to display the message “Operating system not found,” and Windows does not start, use your supplied System Recovery CD to restore the software titles shipped with your notebook. See “To use the System Recovery CD(s)” for more information.



The System Recovery CD restores your notebook to its original state, therefore user data and applications will be lost.

My notebook stops responding or does not shut down.

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

- ☐ Try restarting the notebook. On the Windows taskbar, click Start, select Shut Down, and then click OK.
- ☐ If the notebook does not restart, press the Ctrl+Alt+Delete keys simultaneously, and then click Shut Down on the Windows Security screen.
- ☐ If the previous step does not work, press and hold the power button for at least four seconds. This turns off the power.
- ☐ If your notebook stops responding while playing a CD or DVD, stop the CD/DVD, restart the notebook by pressing the Ctrl+Alt+Delete keys simultaneously, and then clicking Shut Down on the Windows Security screen.
- ☐ Unplug the notebook from the AC adapter and remove the battery pack from your notebook.



Pressing the Ctrl+Alt+Delete keys simultaneously or turning off the notebook with the power switch may result in data loss in files that are currently open.

The power management setting is not responding.

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

- ☐ To restore the notebook to its normal operating stability:

- 1 Close all open applications.
- 2 Restart the notebook by pressing the Ctrl+Alt+Delete keys simultaneously and then selecting Restart from the drop-down list.



If this procedure does not work, press and hold the power button for four seconds or longer to shut down the notebook.

The sound of my notebook's fan is too loud.

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

Why does the System Properties dialog box display a slower CPU speed than advertised?

- ☐ Your computer uses speed-controlling technology. The System Properties dialog box may display the CPU's current speed rather than the maximum speed.

Troubleshooting the LCD Screen

My LCD screen is blank.

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

My LCD screen continues to show the previous screen.

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

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

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

I want to change the video resolution of my display.

Follow this procedure to change the video resolution of your display.

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

I cannot switch the LCD display to TV, and vice versa.

- ☐ Make sure that the TV is connected, configured and powered on correctly before starting the notebook. See “Selecting the Display Mode” for more information.

I changed the display screen settings to 1600 x 1200 pixels, but now the fonts are too small. How do I increase the display font size?

To increase the display font size, see “Display Properties Notes” for more information.

Troubleshooting the Mouse and Touchpad

My mouse does not work.

- ❑ If you are using an external mouse, check that the mouse is plugged into the mouse connector. See “Connecting a PS/2 External Mouse or Keyboard” for more information.
- ❑ If you are using an optional Sony USB mouse PCGA-UMS1 series, check that the mouse is plugged into the USB port.
- ❑ If you are still experiencing problems, use your supplied Driver Recovery CD to reinstall the mouse drivers. See “To use the Driver Recovery CD(s)” for more information.

My touchpad does not work properly.

- ❑ You may have disabled the touchpad without connecting a mouse to the notebook. To enable the touchpad:
 - 1 Press the Windows key and use the arrow keys to select Programs, and then Sony Notebook Setup.
 - 2 Select the Touchpad tab using the arrow keys.
 - 3 Select Enable Touchpad, and then press the Enter key.
- ❑ You must restart the notebook to make the touchpad work again.
- ❑ If your touchpad is interpreting a single tap as a double-click, you must adjust the button assignments. Follow these steps:
 - 1 Press the Windows key and use the arrow keys to select Control Panel, and then Mouse.
 - 2 Change the button assignments in the Mouse Properties dialog box. (One of the buttons is assigned to the double-click action.)
- ❑ If you are still experiencing problems, check that another mouse was not installed.
- ❑ You may need to use your Driver Recovery CD to reinstall the mouse drivers. See “To use the Driver Recovery CD(s)” for more information.


The pointer does not move while using the Touchpad or Mouse.

- ❑ The computer should be restarted. Follow these steps:
 - 1 Press the Windows key.
 - 2 Press the “U” key to open the Shut Down Windows screen.
 - 3 Press the “R” key to restart your computer.
- ❑ If your Notebook does not restart, press the Ctrl+Alt+Delete keys simultaneously, and then select Shut Down. The Shut Down Windows screen appears. Press the “R” key to restart your Notebook, and click OK.
- ❑ If you cannot restart your notebook as described in the step above, press and hold the power button for more than four seconds to turn off the notebook.
- ❑ If the pointer does not move while playing a disc, press the Ctrl+Alt+Delete keys simultaneously to stop playback and restart the notebook.
- ❑ If you are still experiencing problems, check that another mouse was not installed.
- ❑ You may need to use your supplied Driver Recovery CD to reinstall the touchpad or mouse drivers. See “To use the Driver Recovery CD(s)” for more information.

Troubleshooting Drives, PC Cards, and Peripheral Devices

I cannot establish a connection between two VAIO computers when using an i.LINK cable.

- 1 Disconnect the i.LINK* cable from both computers and then reconnect it.
- 2 Wait for the computers to respond. If neither computer responds after a few moments, restart both computers.

 The computers may not recognize an i.LINK connection after returning from a power saving mode (Standby or Hibernate). If this happens, restart the computers to establish a connection.

My floppy disk drive (optional) cannot write to a floppy disk.

- ☐ Check that the optional, external floppy disk drive is properly connected to your notebook. See “Connecting an External Floppy Disk Drive” for more information.
- ☐ If the floppy disk is write-protected, disable the write-protect feature or use a floppy disk that is not write-protected.

My optical disc drive is not playing my CD or DVD properly.

- ☐ Check that the label of the disc is facing up.
- ☐ If the disc requires software, check that the software is installed according to the manufacturer’s instructions.
- ☐ A dirty or damaged disc may cause the notebook to stop responding while it tries to read the disc. If necessary, restart the notebook, remove the disc, and then check it for dirt or damage.
- ☐ If you see video but can not hear audio, check all of the following:

* i.LINK is a Sony trademark used to designate that a product contains an IEEE 1394 connection. The i.LINK connection may vary, depending on the software applications, operating system, and compatible i.LINK devices. All products with an i.LINK connector may not communicate with each other. Refer to the documentation that came with your compatible i.LINK device for information on operating conditions and proper connection. Before connecting compatible i.LINK PC peripherals to your system, such as a CD-RW or hard disk drive, confirm their operating system compatibility and required operating conditions.

- ❑ Check that your optical drive does not have the mute setting enabled.
- ❑ Check the volume setting in the audio mixer.
- ❑ If you are using external speakers, check the volume settings, and then check the connections between your external speakers and the notebook.
 - 1 Click Start, Settings, Control Panel, System, and then select Device Manager.
 - 2 Check that the correct drivers are installed properly.
- ❑ Do not use adhesive labels to identify the CD. The label may come off while the disc is in use in the optical drive and cause the drive to malfunction.
- ❑ If a region code warning appears when you try to use your optical drive, it may be that the DVD you are trying to play is incompatible with the optical drive. Check the region code listing on the DVD packaging.
- ❑ Condensation may cause the notebook to malfunction. If this occurs, do not use it for at least one hour.

My optical drive tray does not open.

- ❑ Check that the notebook is turned on.
- ❑ Press the Eject button on the optical drive.
- ❑ If the Eject button does not work, open the tray by inserting a thin, pointed object (such as a paper clip) in the hole to the right of the Eject button.

I cannot use Digital Video (DV) devices. The message “DV equipment seems to be disconnected or turned off” appears.

- ❑ Check that the DV device is turned on and that the cables are properly connected.
- ❑ If you are using multiple i.LINK®* devices, the combination or order of the devices may be causing the problem. In this case, turn off your notebook and

* i.LINK is a Sony trademark used to designate that a product contains an IEEE 1394 connection. The i.LINK connection may vary, depending on the software applications, operating system, and compatible i.LINK devices. All products with an i.LINK connector may not communicate with each other. Refer to the documentation that came with your compatible i.LINK device for information on operating conditions and proper connection. Before connecting compatible i.LINK PC peripherals to your system, such as a CD-RW or hard disk drive, confirm their operating system compatibility and required operating conditions.

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

My PC Card is not working.

- ❑ Check that the PC Card is installed properly.
- ❑ Check that the PC Card is compatible with Microsoft® Windows®.
- ❑ Use the Sony Notebook Setup utility to disable devices you are not currently using.
- ❑ If you are using two PC Cards, use the Sony Notebook Setup utility to disable the devices you are not currently using.
- ❑ Check that any necessary drivers were installed properly. See “Using Your Recovery CDs” for more information.

Troubleshooting Software

My software program stops responding or crashes.

Contact the software publisher or designated provider for technical support. Refer to “Application, Driver, and System Recovery CDs” for more information.

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

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

What software do I use for CD-R/CD-RW software functions?

- ❑ Sony recommends using the preinstalled Drag'n Drop software to create any CDs on your VAIO® computer, if the specific model you purchased is preconfigured with all necessary components for CD-R and CD-RW capability. Sony does not guarantee the performance of the “Create CD” feature that is provided by the software, RealJukebox2 Basic for Sony. Some CD-ROM drives or drivers may experience problems when using this feature. For more information about this issue, visit the RealNetworks Service and Support Web site at <http://service.real.com>.

Why is my computer operating improperly after downloading the CD-burning feature of RealJukebox software?

Sony does not guarantee the performance of the “Create CD” feature that is provided by the software, RealJukebox2 Basic for Sony. Some CD-ROM drives or drivers may experience problems when using this feature. For more information about this issue, visit the RealNetworks Service and Support Web site at <http://service.real.com>.

I cannot use the DVgate™ software.

- ❑ If your notebook is using the Ultimate Battery Life profile for its power saving mode, you cannot use DVgate or Smart Connect software. Please

select another profile. Preferably, connect your notebook to AC power when using these features.

Troubleshooting the Modem

My modem does not work.

- ☐ Check that the phone line is plugged into the line jack. See “Connecting a Phone Line” for more information.
- ☐ Check that the phone line is working. You can check the line by plugging in an ordinary phone and listening for a dial tone.
- ☐ Check that the phone number the program is dialing is correct.
- ☐ Check that the software you are using is compatible with the notebook’s modem. (All preinstalled Sony programs are compatible.)
- ☐ If you are still experiencing problems, use your supplied Driver Recovery CD to reinstall the modem drivers. See “To use the Driver Recovery CD(s)” for more information.

My modem connection is slow.

Your notebook is equipped with a V.90 compatible modem. Many factors may influence modem connection speed, including telephone line noise or compatibility with telephone equipment (such as fax machines or other modems). If you think your modem is not connecting properly to other PC-based modems, fax machines, or your Internet Service Provider (ISP), check the following:

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

Troubleshooting Audio

My speakers make no sound.

- ❑ If the built-in speakers are turned off, press the Fn+F3 keys simultaneously to turn on the speakers. You can also turn on the speakers using the center Jog Dial™ control.
- ❑ If the speaker volume is turned to the minimum, press the Fn+F4 keys simultaneously, and then press **↑** or **→** to increase the volume or you can use the center Jog Dial™ control to adjust the volume.
- ❑ If nothing is displayed when you press the Fn+F3 or Fn+F4 keys simultaneously, then do the following:
 - 1** Click Start on the Windows® taskbar, point to Settings, point to Control panel, and then click Sounds and Multimedia. The Sounds and Multimedia Properties dialog box appears.
 - 2** Select the Audio tab, and click Advanced in the Sound Playback box. The Advanced Audio Properties dialog box appears.
 - 3** Make sure the correct speaker setup is selected in the Speaker Setup box. Click OK.
- ❑ If your notebook is powered by batteries, check that the battery packs are inserted properly and that they are charged.
- ❑ If you are using an application that has its own volume control, check that the volume is turned up.
- ❑ Check the volume controls in the Windows® taskbar.
- ❑ If you connect external speakers, check that the speakers are properly connected and the volume is turned up. If the speakers have a mute button, make sure it is off. If the speakers are powered by batteries, check that the batteries are inserted properly and that they are charged.
- ❑ If you have connected an audio cable to the Headphone jack, disconnect the cable.
- ❑ If you are still experiencing problems, use the supplied Driver Recovery CD to reinstall the drivers. See “To use the Driver Recovery CD(s)” for more information.

My microphone does not work.

If you are using an external microphone, check that the microphone is plugged into the Microphone jack. See “Connecting an External Microphone” for more information.

Troubleshooting the Printer

I cannot print.

- ❑ Make sure the power to the printer is on, and the printer cable is securely connected to both the printer and your notebook.
- ❑ The default setting for the printer port mode is correct for most printers. If you cannot print, try changing the printer port mode.
 - 1 Click Start on the Windows® taskbar, and then click Settings.
 - 2 Click Control Panel, then Sony Notebook Setup, and select the Printer tab.
 - 3 Change the printer port mode to bi-directional if it is set to ECP. Change the printer port mode to ECP if it is set to bi-directional.
- ❑ Your connected printer may not function after the notebook resumes from a power saving mode. If this occurs, follow these steps to reset the printer connection:
 - 1 Click Start, point to Settings, and then select Printers.
 - 2 Right-click the icon of the printer that is not functioning, and then select Properties to open the Properties window.
 - 3 Click OK to close the Properties window. The printer should now function properly.

Troubleshooting Wireless LAN

The computer cannot connect to a Wireless LAN Access Point.

- ☐ Make sure the Wireless LAN PC card is properly seated in the PC card slot on the left side of the notebook.
- ☐ Make sure power to the access point is turned on.
- ☐ Check if the access point is displayed in the networks window. Do the following:
 - 1 Click Start, point to Settings, then Control Panel, and select Wireless Network. The Add/Edit Configuration Profile window opens.
 - 2 Click Edit.
 - 3 Type your profile name, and make sure “access point” is selected in the Network Type box. Click Next.
 - 4 Click Scan. The Scan for Network Names pop-up window opens, displaying a list of networks.
 - 5 Look for the name of the network in which you are trying to connect. If you see the name, select it and click OK. See “Connecting to a Wireless LAN” for more information.

If the network name does not appear on the list, try re-establishing the network connection. See “Connecting to a Wireless LAN” for more information.
- ☐ Connection availability is affected by distance and obstructions. You may need to move your notebook away from obstructions or closer to any access point you may be using.
- ☐ Be sure that the encryption key is correct.

I cannot access the Internet.

- ☐ Make sure the Wireless LAN PC card is properly inserted into the PC card slot on the left of the notebook.
- ☐ Check if your notebook and the access point are connected to one another.
- ☐ Check the access point settings. Refer to the instructions supplied with the access point.

- ❑ Move your notebook away from obstructions or closer to any access point you may be using.

The data transfer speed is slow.

- ❑ The Wireless LAN data transfer speed is affected by distance and obstructions between devices and access points. Other factors include device configurations, radio conditions, and software compatibility. To maximize the data transfer speed, move your notebook away from obstructions or closer to any Access Point you may be using.
- ❑ If you are using a Wireless LAN Access Point, the device may be temporarily overloaded depending on the number of other devices communicating via the access point.
- ❑ If your access point interferes with other access points, set up the wireless channel with the access point. Refer to the instructions supplied with the access point.

The communication speed is interrupted or slowed down when MPEG2 data is transferred.

The typical effective data transfer speed via an access point is 4-5 Mbps when adhering to the IEEE802.11b standard. High-rate stream transfers with MPEG2 data may lower this rate.

Data transfers are interrupted.

Data transfer interruptions may occur with large files or use of microwaves and cordless phones when connected to an access point. To avoid data transfer interruptions, do the following:

- ❑ Move the computer closer to the access point.
- ❑ Make sure the access point connection is intact.
 - 1 Click Start on the taskbar, and then Programs.
 - 2 Point to ORiNOCO, and select Client Manager. The ORiNOCO client Manager window opens.
 - 3 Check the connection status.
- ❑ Change the access point channel. See your access point instructions for more information.

Getting Help

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

Support Options

If you have questions about your notebook or the preinstalled software, refer to the following sources for answers in the sequence listed below.

1 VAIO® Notebook User Guide

The online VAIO® Notebook User Guide and the printed VAIO® Notebook Quick Start provide you with information on how to maximize your notebook capabilities and solve common problems. (Windows® XP) To access the User Guide, click Start on the Windows® taskbar, select Help and Support, and click VAIO User Guide. (Windows 2000) To access the User Guide, click Start on the Windows taskbar, select VAIO Help Center, and VAIO Documentation. The quick start is supplied with your notebook.

2 Software Manuals and Online Help Files

The software preinstalled on your notebook may come with an online manual. These manuals are stored on the hard disk drive as online Help files. You can find the Help files from the Help menu under the specific software application. Some software applications may come with a printed manual.

3 Operating System Online Support

Your notebook comes preinstalled with Microsoft® Windows®. For operating system support, you can access Microsoft® customer support at: <http://support.microsoft.com/directory/>.

4 VAIO Support Agent

(Windows XP) You can find VAIO Support Agent by clicking the Start button and then selecting Help and Support. (Windows® 2000) You can find VAIO Support Agent from the Windows desktop. Using advanced diagnostic technology, Sony's VAIO Support Agent runs scheduled protections of your applications, network settings, and other important software settings. When your software is protected, you can use VAIO Support Agent to repair software problems by restoring your software to any of the previously protected states.

5 Sony Computing Support

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

6 Sony Fax-on-Demand

This service, which requires a fax machine or your fax software, provides answers to commonly asked questions. You can use this automated service to request a list of available topics, then select the topics that you want to receive. To contact the Sony fax-on-demand service, call: 1-888-4-SONY-PC (1-888-476-6972).

7 Sony Customer Support

Software support is available free of charge for 90 days after the original date of purchase. You can call and speak with a Sony Customer Support Representative without using your notebook by calling: 1-888-4-SONY-PC (1-888-476-6972).

Software Support Information

Adobe® Acrobat® Reader®, Photoshop® Elements, Premiere® LE (Adobe Systems Inc.)

Web site	http://www.adobe.com/
e-mail	techdocs@adobe.com
phone	206-675-6126 (fee-based support)
fax	206-628-5737
hours	M-F, 6 AM-5 PM (PST)

America Online® (America Online, Inc.)

Web site	http://www.aol.com/
phone	800-827-6364
hours	7 days a week, 24 hours a day

Apple QuickTime® (Apple Computer, Inc.)

Web site	http://www.apple.com
phone	800-275-2273
hours	M-F, 6 AM-6 PM (PST)

Arcsoft PhotoPrinter® 2000 Pro (ArcSoft, Inc.)

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

Drag'n Drop CD (DigiOn, Inc., and Easy Systems Japan Ltd.)

Web site	http://www.easy.co.jp/dde/sony/tosupportne.html
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EarthLink™ Network Total Access (EarthLink Network Inc.)

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

PC-Cillin® 2000 (Trend Micro, Inc.)

Web site	http://www.antivirus.com/pc-cillin/support/
phone	510-859-0308; 900-820-8324*
hours	M-F, 8 AM-5 PM (PST)

* Support from 510-859-0308 is free of charge, but subject to delays. Support from 900-820-8324 is fee-based, but offers immediate response.

Quicken® (Intuit Inc.)

Web site	http://www.intuit.com/support
phone	900-555-4932; 800-644-3193*
hours	M-F, 5 AM-5 PM (PST)

* Support from 900-555-4932 is fee-based. Support from 800-644-3193 is automated and free of charge.

RealJukebox®, RealPlayer® (RealNetworks, Inc.)

Web site	http://service.real.com/rjoptions.html
e-mail	http://service.real.com/help/call.html (online email form)

Sony Applications (Sony Electronics Inc.)

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

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

Change text in this variable definition to document title.

Windows® Operating System, Word (Microsoft Corp.)

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

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

WinDVD® (InterVideo, Inc.)

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

Sony Service Center

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

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