




Welcome

Congratulations on your purchase of this Sony VAIO® computer, and welcome to the online VAIO® Computer User Guide. This user guide provides detailed information on all aspects of using your new VAIO computer, from keyboard functions to preinstalled software programs.

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

 View the [Electronic Flyer](#), which provides updates and supplemental information about your computer.

 Go to the [Sony Computing Support Site](#) to view the VAIO® Computer Specifications, which list your computer's hardware specifications and preinstalled software information.

 For Sony software information, click **Start** and **Welcome to VAIO Life**.

This section provides information on how to safely use your Sony computer.

Applying Ergonomics

Your computer is a portable device and can be used in a variety of environments. Whenever possible, you should apply the following ergonomic considerations:

- **Position of your computer** — Place the computer directly in front of you as you work. Keep your forearms horizontal, with your wrists in a neutral, comfortable position while using the keyboard, touch pad, or external mouse. Let your upper arms hang naturally at your sides. Take breaks during sessions with your computer. Excessive use of the computer may strain muscles or tendons.
- **Furniture and posture** — Sit in a chair with good back support and armrests. Adjust the level of the chair so your feet are flat on the floor. A footrest may make you more comfortable. Sit in a relaxed, upright posture and avoid slouching forward or leaning far backward.
- **Viewing angle of the computer's display** — Tilt the display to find the best viewing angle. Also try adjusting the brightness setting of the display. Following these suggestions can reduce eye strain and muscle fatigue.
- **Lighting** — Choose a location where windows and lights do not create glare or reflection on the display. Use indirect lighting to avoid bright spots on the display. You can purchase accessories for your display that help reduce glare. Proper lighting adds to your comfort and work effectiveness.
- **Placement of an external display** — When using an external display, set the display at a comfortable viewing distance. Make sure the display screen is at eye level or slightly lower when you are sitting in front of the monitor.

Storing Your Computer

- Do not use or store your computer in a location subject to:
 - Heat sources, such as radiators or air ducts
 - Direct sunlight
 - Excessive dust
 - Moisture or rain
 - Mechanical vibration or shock
 - Strong magnets or speakers that are not magnetically shielded
 - Ambient temperature higher than 95°F (35°C) or less than 40°F (5°C)
 - High humidity
- Do not place electronic equipment near your computer. When running, the computer's electromagnetic field may cause other electronic equipment in close proximity to malfunction.
- Provide adequate air circulation to prevent internal heat buildup. Do not place your computer on porous surfaces such as rugs or blankets, or near materials such as curtains or draperies that may block ventilation. Leave a space of at least 8 inches (20 cm) behind the back of the computer.
- If the computer is brought directly from a cold location to a warm one, moisture may condense inside your computer. In this case, allow at least one hour before turning on your computer. If any problems occur, unplug your computer, and contact your Sony Service Center.
- The computer uses high-frequency radio signals and may interfere with radio or TV reception. Should this occur, move the computer a suitable distance away from the radio or TV.
- Do not drop the computer or place heavy objects on top of the computer.

Using Cables and Connections

- Use only specified peripheral equipment and interface cables.
- Do not use cut or damaged connection cables.
- If the telephone company makes a service call to your home or office and determines that your computer is responsible for a problem, the telephone company may bill you for the service call. Also, if you do not disconnect your computer when it is adversely affecting a telephone line, the telephone company has the right to disconnect your service until you correct the problem.

Cleaning Your Computer

- Clean the computer with a soft, dry cloth or a soft cloth lightly moistened with a mild detergent solution. Do not use any type of abrasive pad, scouring powder, or solvent such as alcohol or benzine, as these may damage the finish of your computer. You can use canned compressed air specifically for computers to remove dust.
- If a solid object falls onto the computer or a liquid leaks into the computer, immediately turn off and unplug the computer. It is best to have the computer checked by qualified personnel before you use it again.
- Avoid rubbing the LCD screen as this can damage the screen. Use a soft, dry cloth to wipe the LCD screen or canned compressed air.
- Always disconnect the power cord before cleaning the computer.

Handling the LCD Screen

- Direct sunlight can damage the LCD. Be careful when using the computer near a window.
- Do not scratch the LCD or exert pressure on it. This can cause a malfunction.
- Using the computer in low temperature conditions may produce a residual image on the screen. This is not a malfunction. When the computer returns to normal temperature, the screen returns to normal.
- The screen becomes warm during operation. This is normal and does not indicate a malfunction.
- The LCD is manufactured using high-precision technology. You may, however, see tiny black points and/or bright points (red, blue, or green) that continuously appear on the LCD. This is a normal result of the manufacturing process and does not indicate a malfunction.

Your VAIO® computer comes with a battery and an AC adapter. This chapter explains how to install and use these supplied accessories to power your computer. It also describes ways you can efficiently utilize the battery as a power source.

Using AC Power

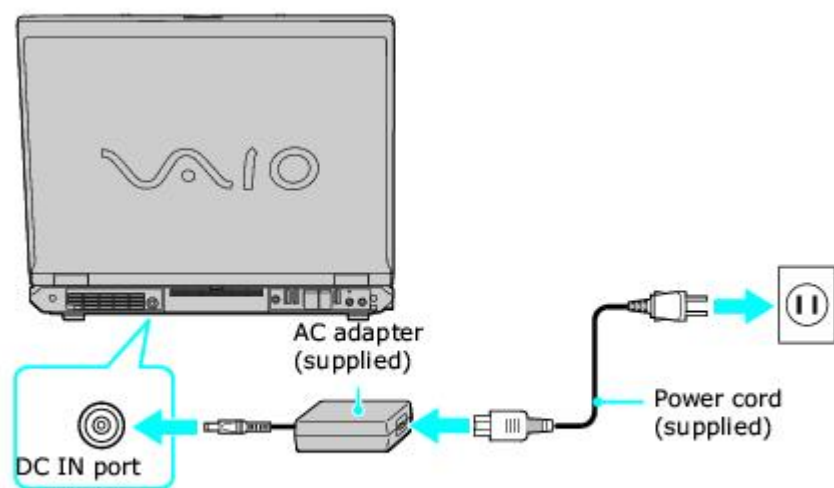
The supplied battery is not charged when you receive your computer. To charge the battery and begin using the computer immediately, insert the battery into the computer and use the supplied AC adapter as a power source. The computer automatically charges the installed battery while it uses AC power.

Connecting the AC adapter


To connect the AC adapter

1. Plug the AC adapter cable into the DC IN port.

Connecting the AC Adapter to the Computer



2. Plug the power cord into the AC adapter and an AC outlet.

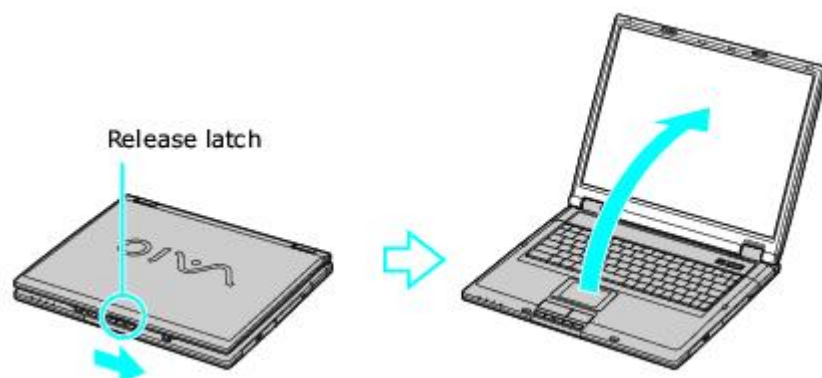
 Use only the supplied AC adapter with your computer.

Turning on the computer

To open and turn on the computer

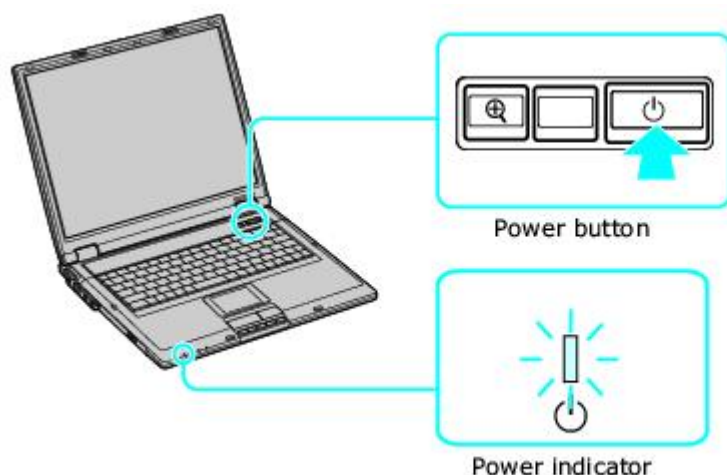
1. Slide the cover release latch and lift the cover while holding the bottom of the computer firmly.

Opening the Computer







2. Press the power button until the power indicator turns on.

Turning on the Computer





 If you continue to press the power button, the computer turns off.




3. If the computer screen is too dark or too bright, follow these steps to adjust the brightness:
 - Your computer is equipped with a Brightness button, located next to the Power button. Pressing it will adjust the LCD screen brightness.
 - To increase brightness, press the **Fn** and **F5** keys, and then press the **Up Arrow**  or the **Right Arrow**  key.
 - To decrease brightness, press the **Fn** and **F5** keys, and then press the **Down Arrow**  or the **Left Arrow**  key.

Using the Battery

Your computer, depending on the model you purchased, may come equipped with one battery bay and one multipurpose bay that supports a second battery. If your computer comes with two bays, you can purchase a second rechargeable battery to extend your computing time. For information on how to extend the life of the battery, see [Conserving Battery Power](#) for more information.

 When operating your computer on battery power, your computer's CPU speed is reduced.

 The battery that comes with your computer is not fully charged at the time of purchase.

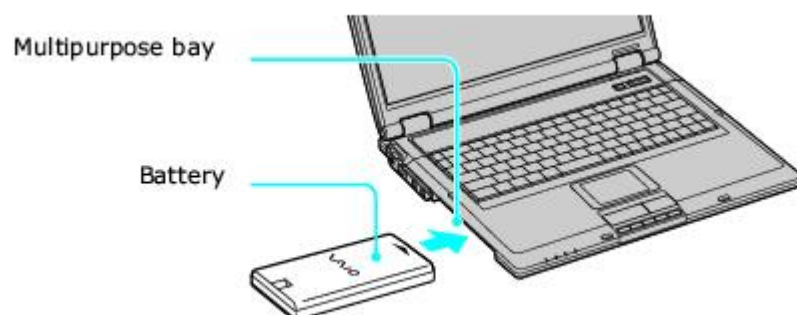
 The brightness of your computer screen automatically dims when you switch from AC power to battery power. To increase the brightness, press the **Fn** and **F5** keys, and then press the **Up Arrow**  or **Right Arrow**  key.

Using a second battery

To insert a second battery

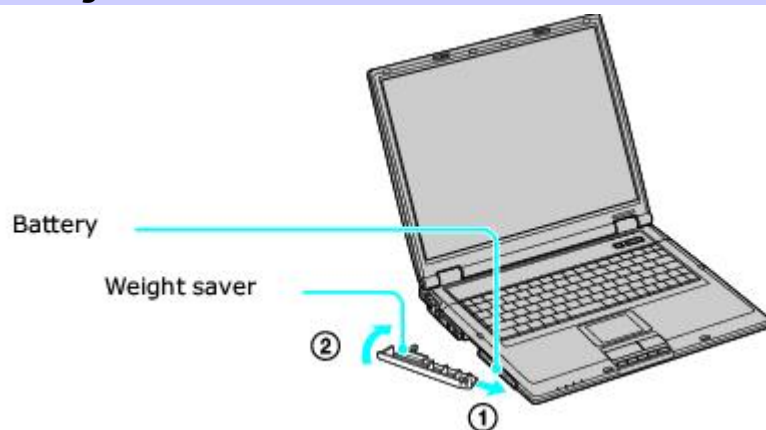
1. If another device is in the multipurpose bay, remove that device.
2. Insert the battery into the multipurpose bay. When the computer uses the second battery, the Battery 2 indicator turns on.

Inserting the Second Battery



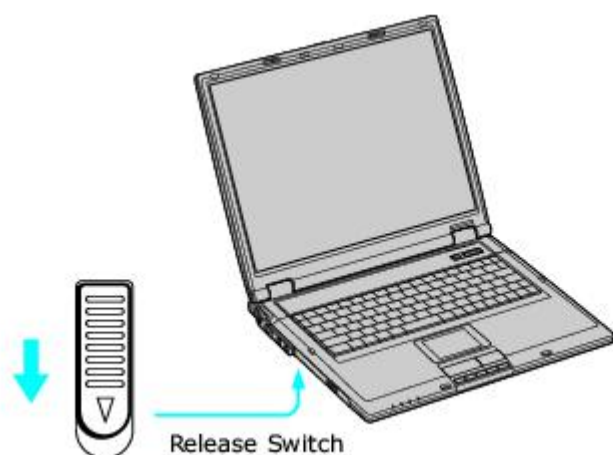
3. Slide the weight saver in the direction of the arrow until it clicks into place. The weight saver stabilizes the battery.

Inserting the Weight Saver





4. Lock the weight saver **RELEASE** switch.

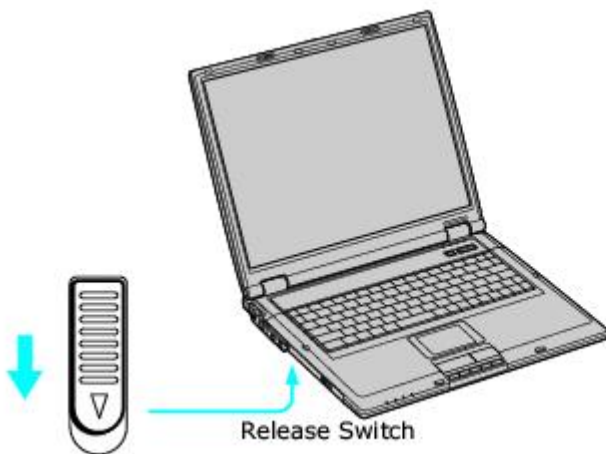
Locking the Weight Saver



To remove the second battery

1. Make sure the Battery 2 indicator is off and the Battery 1 indicator is on or the computer is connected to AC power. If the Battery 2 indicator is on:
 1. Double-click the **CPU** icon  or **Profile** icon , depending on the model you purchased. The **PowerPanel** dialog box appears.
 2. On the **Battery** tab, click **Primary Battery** in the **Battery Switch** box.
 3. Click **OK**.
2. Turn the computer over, and unlock the weight saver and the multipurpose bay.

Unlocking the Second Battery



3. Pull the weight saver and battery gently from the multipurpose bay.
4. Insert the weight saver into the multipurpose bay to protect the bay.


Conserving Battery Power

You may use the power saving modes and PowerPanel utility to conserve battery power. Conserving battery power may significantly extend your computing time, depending on how you use your computer.

Using power saving modes

In addition to the normal operating mode, which allows you to turn off specific devices to save power, your computer has two distinct power saving modes: Standby and Hibernate. Use the Standby and Hibernate power saving modes to override a power profile setting and initiate immediate action.

- **Standby** — Saves the state of the system and peripheral devices in memory (RAM). Power consumption is reduced to a minimum. The system remains on, and the computer screen (LCD) is off.
- **Hibernate** — Saves the state of the system and peripheral devices to the hard disk. Power consumption is reduced to the lowest possible setting without being completely off. Hibernate mode consumes the lowest level of power. Your computer enters Hibernate mode when the remaining battery charge drops below 5 percent, regardless of the setting you select.


 Since some programs and peripheral devices prevent the system from entering Hibernate mode, save your data frequently to avoid data loss.

To activate Standby mode

1. Press the **Fn** and **Esc** keys. The power indicator blinks in this mode.
2. Press any key to return to normal mode.

To activate Hibernate mode

1. Press the **Fn** and **F12** keys, or press the power button and release it immediately. Do not move the computer until the power indicator turns off.
2. Press the power button to return to normal mode.

 If your computer does not activate Hibernate mode, see [Battery](#) for more information.


Using PowerPanel utility


The PowerPanel utility enables you to select and customize a predefined power management profile to conserve battery life. The following table describes all the predefined power management profiles in PowerPanel. You can customize the settings for all the following profiles, except the Disable Power Management profile.


Profile


Icon **Description**


 **Maximum Performance**
Provides the best system performance but conserves minimal power.


 **Maximum Battery Life**
Provides power saving features to give you maximum battery life and good performance. It slows the computer and puts it into Standby mode after a specified time.


 **Ultimate Battery Life¹**
Extends the Maximum Battery Life by stopping power to the optical drive and Memory Stick® media slot.


 **Power Management Off**
Disables all power management settings, such as Standby and Hibernate modes. You cannot change the settings of this profile.


 **AC Power**
Indicates when AC power is in use. Similar to Power Management Off and the Standby mode after a half hour. 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 conserving 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.

 **DVD**
Optimizes performance and power requirements for DVD usage.



 **Word Processing**
Optimizes power management with longer time-outs 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 programs.


 **Communications**
Extends battery life by initiating a quick display time-out. The Internal modem remains powered on. 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 selects a profile suitable for active software programs.

To select a profile



1. Right-click the **CPU** icon  or **Profile** icon , depending on the model you purchased. See [Locating battery information](#) for Battery icon descriptions.
2. Select **Profiles**, and click the profile on the shortcut menu. The profile settings are implemented instantly. See [Using PowerPanel utility](#) for descriptions of available profiles.

When you use the battery to power your computer, your system automatically 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 to power your computer.

 See PowerPanel Help for information on customizing the power management profiles.

To customize your profile settings

You can customize your profile settings to sustain enough power for a particular computing function.

1. Right-click the **CPU** icon  or **Profile** icon , depending on the model you purchased.
2. Select **Edit/Create Profiles** from the shortcut menu.
3. In the left panel, select the profile you want to change.
4. In the right panel, right-click the setting under **System, LCD (Video), Hard Disk, or Other Devices** that you want to change. See the following table for a description of each power management setting.
5. Make your changes from the drop-down menu.
6. Click **File**, and click **Save**.

Not all power management settings described in the table below are available on your computer, depending on the configuration you purchased.

Power Management Setting Description

CPU Control¹ Controls the processor speed. You can select either **Performance, Adaptive, or Battery Life**. These selections are listed in order from the greatest to least amount of power consumed.

Standby Timer Controls the time it takes the system to activate the Standby mode when it is idle. The longer you allow the computer to sit idle while it is not in a power saving mode the more power the computer consumes.

Hibernate Timer Controls the time it takes the system to activate the Hibernate mode when it is idle. The longer you allow the computer to sit idle while it is not in a power saving mode the more power the computer consumes. Hibernate mode conserves more power than Standby mode.

CPU Fan Control¹ (On selected models) Controls the speed of the processor fan. You can set the fan speed to different levels. **Level 1 (Quiet)** conserves the most power.

Lid Close Action Controls the state of your system when the lid of the computer is closed. You can select either **Standby, Hibernate, or LCD Off**.

Hibernate on Low Battery Controls the state of your system when the battery power is low. You can turn this setting **On** or **Off**. Selecting **On** conserves the most power when the battery is low.

LCD Brightness Controls the brightness of the computer screen (LCD). You can select a brightness level of one to nine. Page 18

darker you set the computer screen the more power you conserve.

LCD Standby Timer Controls the time it takes the system to turn off power to the computer screen (LCD) when the system is idle. The system itself still functions on full power.

HDD Standby Timer Controls the time it takes the system to turn off power to the hard disk drive when the system is idle. This setting only turns off power to the hard disk drive.

i.LINK Port Controls power to the i.LINK® port. Disabling power to the i.LINK port conserves power.

Memory Stick Port Power-saving Controls power to the Memory Stick media slot. Disabling power to the Memory Stick media slot conserves power.

Optical Drive Power-Saving Controls power to the optical drive. Disabling power to the optical drive conserves power.

† Slows the processor speed.

Locating battery information

You can view the remaining battery charge and miscellaneous battery information on the Battery Information toolbar, the PowerProfile window, and the Power Meter window.

The Battery icons that appear on the **Battery Information** toolbar and PowerPanel window indicate the current status of the installed battery.

Battery icon Charge status



Charging



Fully charged




Discharging



No battery

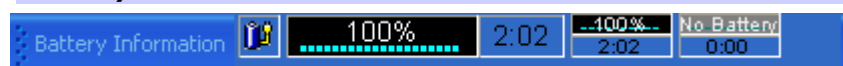
To view the Battery Information toolbar

1. Right-click the center of the Windows® taskbar.
2. Select **Toolbars** from the shortcut menu, and 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 click to cancel **Lock the Taskbar**. Click and drag the edge of the **Battery Information** toolbar to the left until it is in clear view.

The total charge remaining in the battery is listed in percent and real-time values.

Battery Information Toolbar





* The Battery Information Toolbar may appear slightly different on your computer, depending on the number of batteries your computer supports.

- **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.

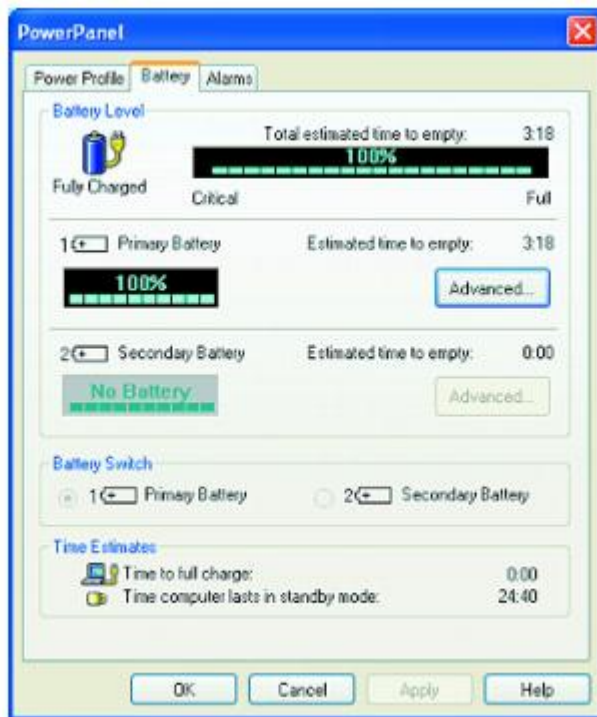
To close the Battery Information toolbar

1. Right-click the **Battery Information** toolbar.
2. Select **Toolbars** from the shortcut menu, and click to cancel **Battery Information**. The **Battery Information** toolbar disappears from the taskbar.

To view the PowerPanel window

Double-click the **CPU** icon  or **Profile** icon , depending on the model you purchased. The **PowerPanel** window appears.

PowerPanel



* The PowerPanel window may appear slightly different on your computer, depending on the number of batteries your computer supports.

- **Power Profile** — Displays the power management settings for various devices on your system. You can change the settings to conserve power.
- **Battery tab** — Displays the total charge remaining in the battery. You can click **Advanced** for specific information on the battery.
- **Alarms tab** — Displays the alarm settings, which notify you when the battery is fully charged or too low. You can change your computer's alarm settings on this window.

Click **Help** in the lower right corner of the window for more information.

To view the Power Meter window

1. Double-click the **Power** icon. The **Power Meter** window appears. You can also rollover the Power icon to view the remaining battery charge.

Power icon

Power status



Computer is using AC power.



Computer is using AC power and charging the battery.



Battery is charging.



Battery is fully charged.

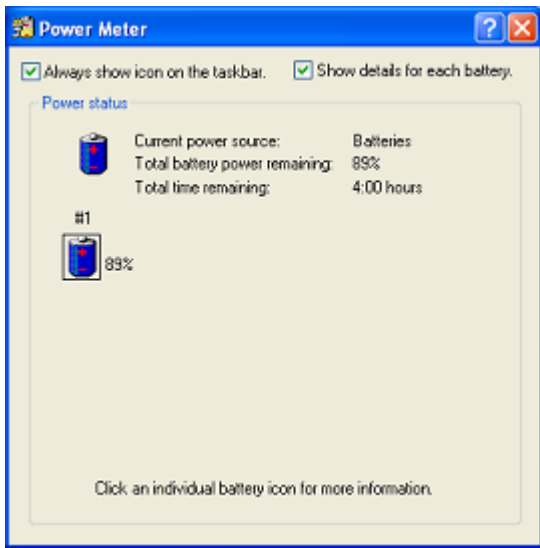


Battery is discharging.



No battery is inserted in the computer.

If the Power icon is not displayed on the Taskbar Notification area, see [To display the Power icon on the taskbar](#)



To display the Power icon on the taskbar

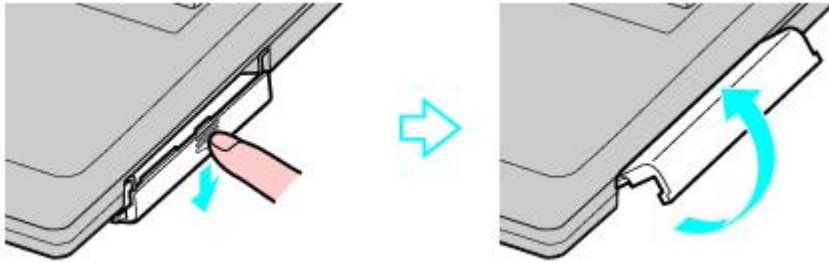
1. Click **Start** on the Windows® taskbar, and click **Control Panel**.
2. Click **Performance and Maintenance**, and click **Power Options**. The **Power Options Properties** window appears.
3. Select the **Advanced** tab, and then select **Always show icon on the taskbar** in the **Options** box. The power icon appears on the taskbar. See the power icon descriptions above for more information.

Inserting a battery

To insert a battery

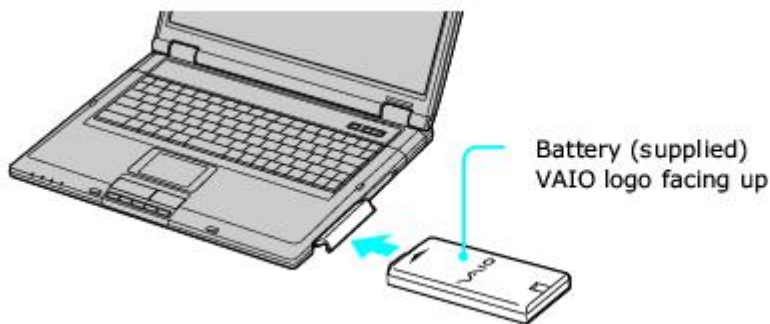
1. Lift the lid of the computer.
2. Push the battery bay cover down to open it. The battery bay cover swings out but does not detach from the computer.

Opening the Battery Bay




3. Slide the battery into the battery bay. If the computer is on, it automatically detects the battery.

Inserting a Battery



4. Push the battery bay cover up until it clicks into place.

 If a port replicator is attached to your computer, do not insert or remove the battery. Lifting and turning the computer with a port replicator attached could cause a temporary loss of power.

Some programs and peripheral devices prevent the system from automatically entering Hibernate. If you are using battery power, save your data frequently to avoid data loss and manually activate a power saving mode. See [Using power saving modes](#) for more information.

Removing a battery

If you are not using the computer for an extended period of time, remove the battery from the computer to avoid damaging the battery. Remove the battery when the computer is off.

To remove a battery

1. Make sure the computer is off.
2. Push the battery bay cover down to open it.
3. Pull the battery out of the battery bay.


Removing a Battery



4. Push in and lift up the battery bay cover until it clicks into place.


Charging a battery

You will need to charge the battery if battery power drops below 10 percent or you have not used the battery for a long time. The lithium-ion battery supplied with your computer may be recharged at any time, whether you wait until the battery is completely or partially discharged. Charging a partially discharged battery does not affect battery life. If you charge the battery and find that battery power is still low, the battery may be reaching the end of its life, and you may need to replace it.

 The battery supplied with your computer is not charged at the time of purchase.


To charge a battery

You can charge the battery when the computer is on or off. However, the battery will charge faster when the computer is off. Charging the battery takes several hours. See your VAIO® Computer Specifications for the approximate time needed to charge your battery.

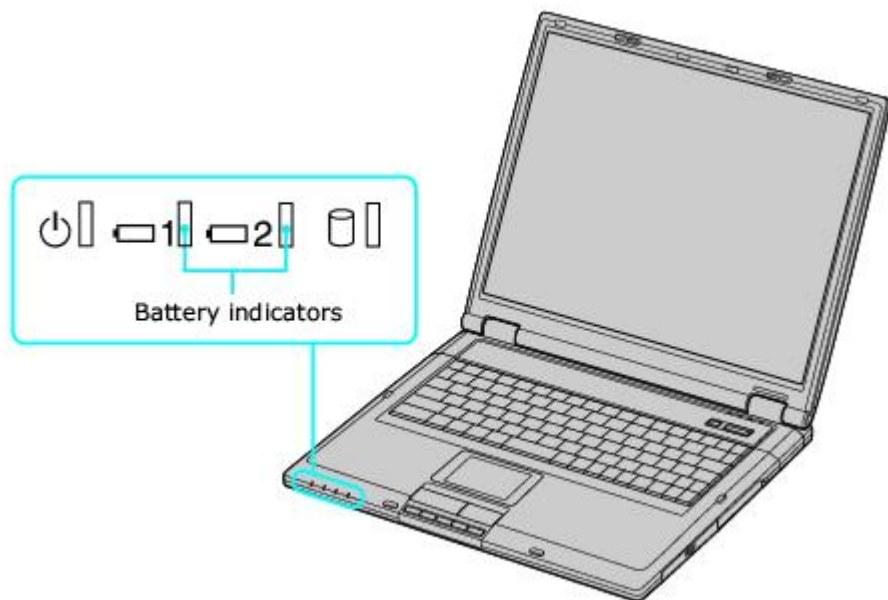
 Charge the battery at temperatures between 50°F and 80°F (10°C to 30°C). Lower temperatures require more time to charge.

1. Insert the battery into the battery bay. If you want to charge more than one battery, insert the second battery into the computer. See [To insert a second battery](#) for more information.
2. Connect the AC adapter to the computer. The computer automatically charges the battery as long as the computer is using AC power.

The battery indicator blinks while the battery charges. The battery indicator stops blinking when the battery is fully charged.

 When using two batteries, the battery you insert first charges first. The second battery you insert begins charging when the first battery is 85 percent charged.

Battery Indicators



Battery indicator status Description

On	The computer is using battery power.
Single blink	The battery is running out of power.
Double blink	The battery is charging.

Notes on batteries

- Never leave the battery in temperatures above 140°F (60°C), such as under direct sunlight or in a car parked in the sun.
- While the battery is in use or being discharged, the battery heats up. This is normal and is not cause for concern.
- Keep the battery away from heat sources.
- Keep the battery dry.
- Do not open or disassemble the battery.
- Do not expose the battery to any mechanical shock.
- Battery life is shorter in a cold environment because of decreased battery efficiency at low temperatures.

Using Special Buttons

Depending on the model you purchased, your VAIO® computer is equipped with a variety of audio- and video-oriented function buttons: Volume Up and Down, Channel Up and Down, TV On, Brightness, and Magnify screen. Only models equipped with a TV tuner and GigaPocket software will feature TV functionality; not all models feature TV functionality.

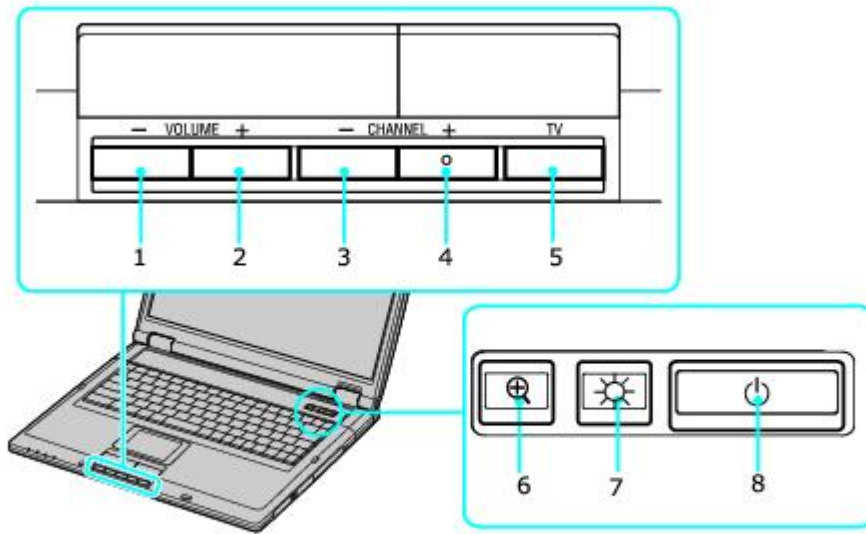
Using Special Buttons

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About the special buttons

The following information shows where the special buttons are located, and briefly describes their functionality.

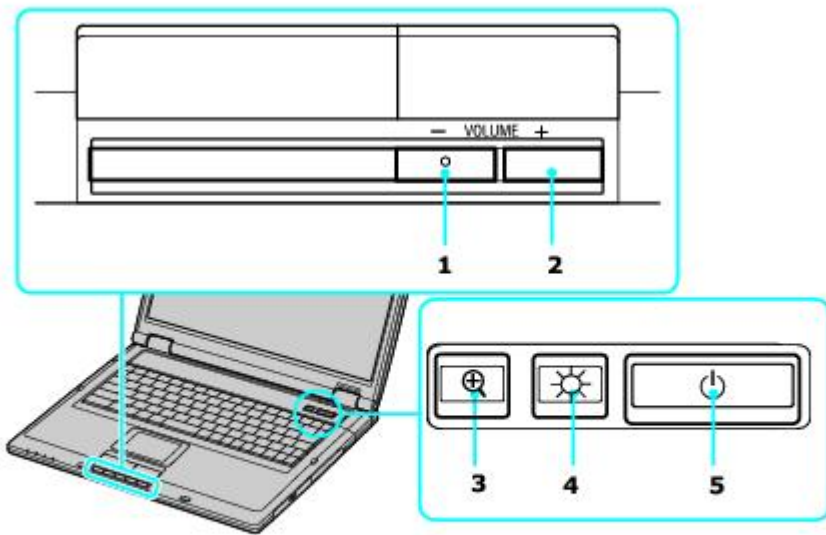
Special Buttons (*GigaPocket models only*)



Number Type of Button

- 1 Volume Down. The Volume Up and Down buttons control the audio output on your computer.
- 2 Volume Up. The Volume Up and Down buttons control the audio output on your computer.
- 3 Channel Down. The Channel Up and Down buttons control the television channel selections.
- 4 Channel Up. The Channel Up and Down buttons control the television channel selections.
- 5 TV On. The TV On button launches GigaPocket software that enables you to watch television or record programs.
- 6 Magnify. The Magnify button, located next to the computer's brightness button, works as a screen resolution toggle button. By pressing it, you can alternate between different screen resolutions.
- 7 Brightness. The Brightness button, located between the Magnify and Power buttons, toggles brightness levels for the computer's LCD screen.
- 8 Power. The Power button turns your computer on or off.

Special Buttons (*Models without GigaPocket*)



Number Type of Button

- 1 Volume Down. The Volume Up and Down buttons control the audio output on your computer.
- 2 Volume Up. The Volume Up and Down buttons control the audio output on your computer.
- 3 Magnify. The Magnify button, located next to the computer's brightness button, works as a screen resolution toggle button. By pressing it, you can alternate between different screen resolutions.
- 4 Brightness. The Brightness button, located between the Magnify and Power buttons, toggles brightness levels for the computer's LCD screen.
- 5 Power. The Power button turns your computer on or off.

Using the TV On button


Certain models are equipped with a TV tuner, which enables you to watch and record television with the help of the GigaPocket software.

The TV On button will launch GigaPocket and its TV viewing/recording capabilities.

For more information, see [Giga Pocket Personal Video Recorder](#).

How to use the TV button


1. Locate the TV button below the touch pad and press the button once.
2. The GigaPocket window appears on the screen.

 You must connect your computer to a television cable or antenna in order to view television with GigaPocket.

Using the TV On button



Using i.LINK Digital Video Recorders

You can connect a digital video (DV) recorder, such as an i.LINK[®]¹ digital video camera recorder, to the i.LINK[®] S400  (IEEE 1394) port on your computer. The i.LINK digital-video camera recorder is an external device that enables you to record and view digital images.

¹ 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.



Connecting an i.LINK digital video recorder

You can connect an i.LINK digital video (DV) recorder when the computer is on or off. Connecting the DV recorder when the computer is in a power saving mode (Standby or Hibernate) may cause the computer to malfunction.

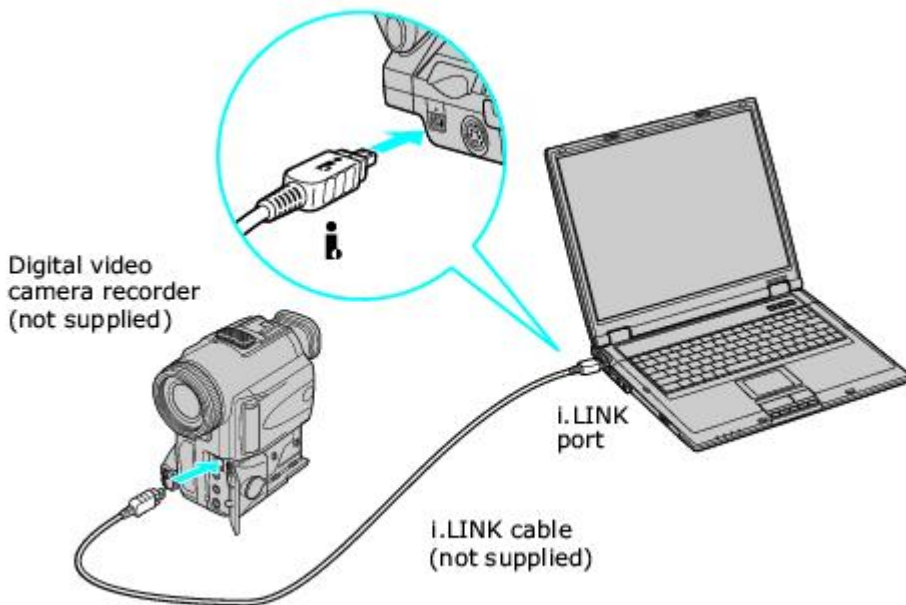
Before you connect an i.LINK digital video recorder


- Do not connect more than one digital video camera recorder at a time. The preinstalled programs on your computer will not recognize multiple cameras.
- Do not connect an external device that requires power from the i.LINK port. The i.LINK port does not supply power to the external device.
- The i.LINK port supports transfer rates of 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 programs you use. See the help guide that accompanied your program for more information.

To connect an i.LINK digital video recorder

1. Turn on the digital video (DV) device and the computer.
2. Plug the i.LINK® cable into the i.LINK port  on the DV device.
3. Plug the other end of the i.LINK cable into the i.LINK port  on your computer. The **Found New Hardware** window appears on the lower right corner of your screen.

Connecting an i.LINK Digital Video Camera Recorder



 See the guide that accompanied your digital video camera recorder for more information on its installation and use.

Disconnecting the i.LINK digital video recorder

You can disconnect the digital video recorder while the computer is on or off. Simply unplug the i.LINK cable from the i.LINK port on the computer. Disconnecting the cable when the computer is in a power saving mode (Standby or Hibernate) may cause the computer to malfunction.

Using a digital video camera recorder

Your computer comes with preinstalled driver software that is compatible with most Sony digital video camera recorders. If you purchased a camera that comes with its own driver software, install these drivers before you use the camera.

To view images

You can view images captured by your digital video camera recorder three different ways. Select one set of instructions from the following list:

- If your digital video camera recorder is compatible with the preinstalled programs, the **Digital Video Device** window appears when you connect the camera to the computer. Select the program you want to use in this window, and click **OK**.
- Click **Start**, and click **All Programs**. Select a program in which to view your images.
- Click **Start**, and click **Welcome to VAIO Life**. Click **Movies**, and select a program in which to view your images.


Using Computer Monitors and Projectors


You can connect an external display (such as a computer monitor or a projector) to your computer.

Connecting a computer monitor

Your computer can display images to the computer screen (LCD), to an external computer monitor, or to both the LCD and external monitor while your computer is on.

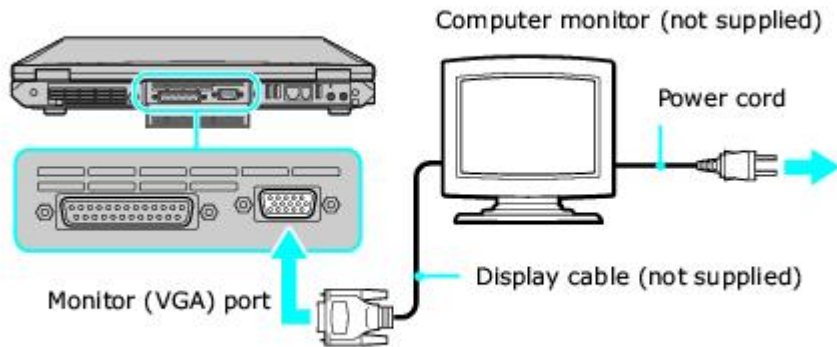
To connect a computer monitor

1. Make sure the computer monitor is plugged into an AC outlet.
2. Plug the display cable into the Monitor (VGA) port  on the computer.
3. If it is not already on, turn on the computer monitor.
4. Press the **Fn+F7** keys to toggle the display between your computer, the monitor, or both the computer and monitor.

 You cannot use the Monitor (VGA) port on your computer when a port replicator is connected to the computer. Use the Monitor (VGA) port on the port replicator instead.

Connecting a multimedia device



Connecting a Computer Monitor




You can connect a multimedia device, such as a multimedia computer monitor or projector, to your computer. Connecting a multimedia device enables you to display images on your computer screen (LCD), the multimedia device, or both.

 For information on connecting a TV to your computer, see [Playing DVDs](#).

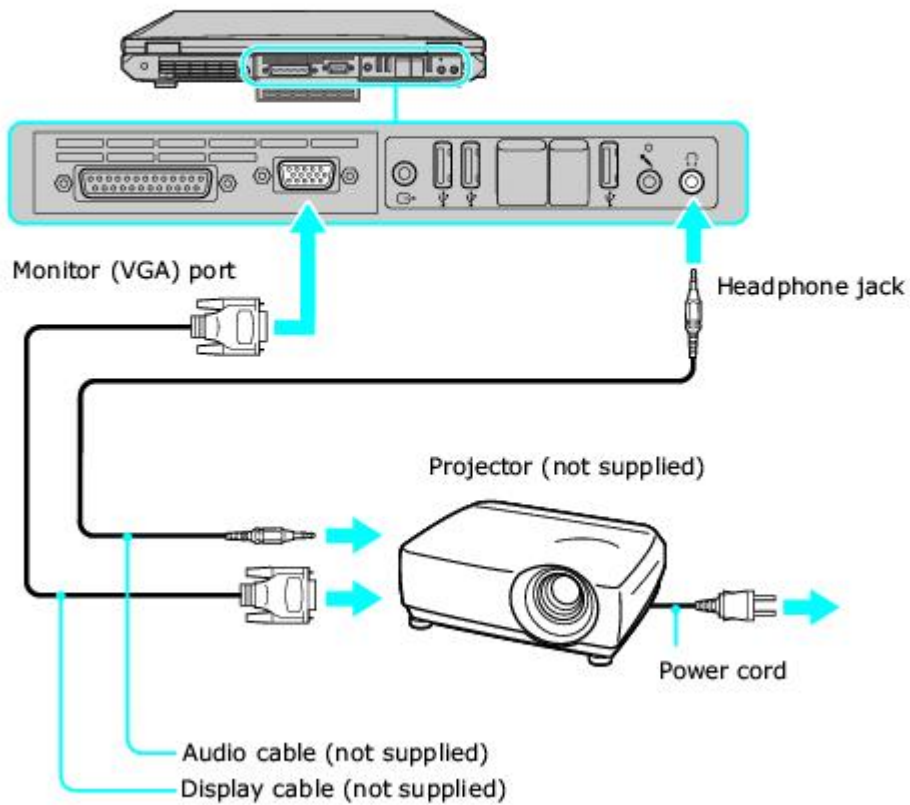
To connect a multimedia computer monitor or projector

1. Plug the device into an AC outlet.
2. Plug the device cable into the Monitor (VGA) port  on your computer. If you are using a multimedia computer monitor, which has built-in speakers and a microphone, plug the audio cable into the Headphone jack  on your computer to hear sound.


 To locate the Monitor port and Headphone jack, see "Locating Controls and Ports" in the "Setting Up" chapter of your printed VAIO® Computer Quick Start.

3. Turn on the device (if it is not already on), and then turn on your computer.

Connecting a Projector



4. Press the **Fn+F7** key combination to toggle the display between your computer, the monitor, or both. See [Selecting a display](#) for more information.

 See the guide that accompanied your projector for more information on its installation and use.


Selecting a display

You can connect external displays to your computer while it is on. When you connect an external display (projector, computer monitor, or TV) to your computer, you can switch the display between the computer screen (LCD), the external display, or both, using shortcut keys.

Shortcut keys Result

Fn+F7 Toggles the display between the computer screen (LCD), a connected TV, and both the LCD and TV.

Select one display (LCD or TV) when playing a DVD. Connect the TV cable before you turn on the computer; otherwise, **Fn+F7** will not work. You cannot use the **Fn+F7** function to switch between LCD and TV once a DVD is inserted into the optical drive.

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

Disconnecting a computer monitor or projector

You can disconnect the external computer monitor or projector by unplugging the monitor (VGA) cable from your computer's port. Disconnecting the external display when the computer is in a power saving mode (Standby or Hibernate) may cause the computer to malfunction.

Using Speakers


Your computer comes with built-in stereo speakers. If you wish to enhance the sound quality of your computer, you can purchase and connect external speakers. If you want to purchase speakers, make sure the speakers are designed for computer use. You can shop Sony online at <http://www.sonystyle.com/vaio> or contact your local retailer.

Connecting speakers

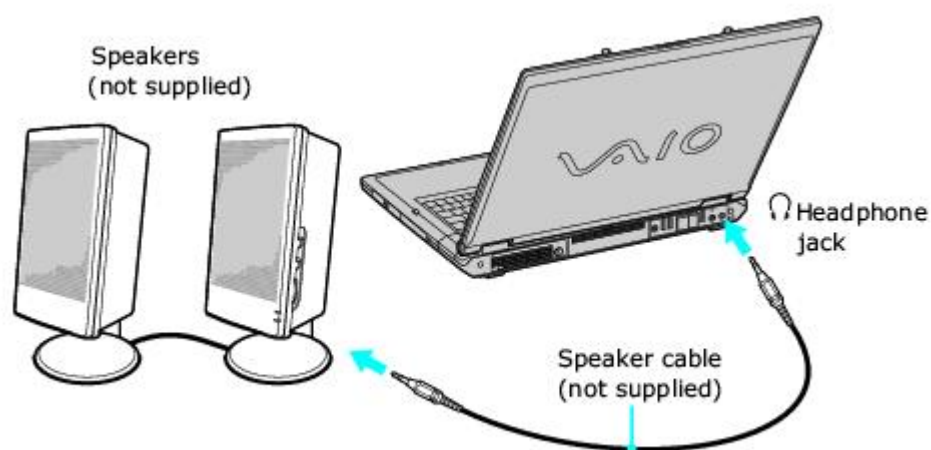
You can connect external speakers to your computer to enhance the sound quality of your computer.

⚠ Do not place floppy disks on the speakers. The speakers' magnetic field may damage the data stored on the floppy disks.

To connect speakers to your computer


1. Turn down the volume of the speakers.
2. Plug the speaker cable into the Headphone jack  on the computer.
3. Plug the other end of the speaker cable into the speaker.

Connecting Speakers




 See the guide that accompanied your speakers for more information on its installation and use.

Disconnecting speakers


You can disconnect external speakers when the computer is on or off. Simply unplug the speaker cable from the Headphone jack  on the computer.

Adjusting the volume

To adjust the volume for playing CDs and DVDs, use the **Volume** icon  on the Windows® taskbar or the Volume Up and Down buttons. Adjusting the volume for playing CDs or DVDs does not adjust the volume for recording sound files.

 You can only adjust the recording volume in the **Recording Control** window. See [Using a microphone to record sound](#) for instructions on how to open this window.




To adjust the volume of your speakers

1. Right-click the **Volume** icon  on the Windows® taskbar, and select **Open Volume Control**. The **Volume Control** window appears.
2. Click and drag the **Volume Control** slider up to increase volume and down to decrease volume.
3. Click to cancel any **Mute** check boxes that are selected.

Sound device Function

Volume Control	Adjust the sound level from the speakers or headphones.
Wave	Adjust the wavfile sound or the system sound of Windows.
SW Synth	Adjusts the internal or external synthesizer volume.
CD Audio	Adjust the volume of the CD in the optical drive.
Microphone	Adjust the internal or external microphone volume.
Telephony	Adjust the modem or telephone volume.
PC Beep	Adjust the beep sound when inserting or removing the PC Card and other devices.
Line ¹	Adjusts the sensitivity of input volume.

¹ On selected models only.

 As a shortcut, you can press the **Fn+F4** keys and the Up Arrow  or Right Arrow  keys to change the volume setting. You can also press the **Fn+F3** keys to toggle the mute option on and off.

Enabling the audio feature

If you do not hear sound when playing a CD or DVD, you may need to enable the audio feature.

To enable the audio feature

1. Click **Start** on the Windows® taskbar, and click **Control Panel**.
2. Click **Performance and Maintenance**, and click **System**. The **System Properties** window appears.
3. Select the **Hardware** tab, and click **Device Manager**. The **Device Manager** window, which lists the hardware devices, appears.
4. Double-click the name of the optical drive, such as **DVD/CD-ROM drives**¹.
5. Double-click the listed drive name, and click the **Properties** tab.
6. Click the **Enable digital CD audio for this CD-ROM device** check box if it is not already selected.

¹The read/write drive letter designation may vary, depending on your system's hardware configuration.

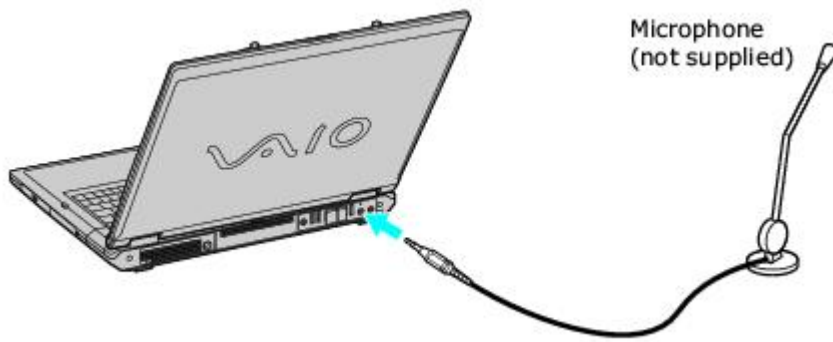
Using Microphones

You can connect an external microphone to your computer to enhance the sound input to your computer. Make sure your microphone is designed for computer use. If you wish to purchase a microphone, shop Sony online at <http://www.sonymstyle.com/vaio> or contact your local retailer.

Connecting a microphone


Plug the microphone cable into the Microphone jack¹ on the computer.

Connecting a Microphone



¹ A protruding dot located next to the Microphone jack distinguishes this jack from the Headphone jack.


Disconnecting a microphone

You can disconnect an external microphone when the computer is on or off. Simply unplug the microphone cable from the Microphone jack  on the computer.

Using a microphone to record sound

You can record messages, memos, etc. by connecting a microphone to the Microphone jack¹ on your computer.


To record from a microphone

1. Double-click the **Volume** icon  on the Windows® taskbar. The **Volume Control** window appears.
2. From the **Options** menu, click **Properties**. The **Properties** dialog box appears.
3. Click to select the **Recording** option in the **Adjust volume for** box, and click **OK**. The **Recording Control** window appears.
4. Click the **Select** check box at the bottom of the **Microphone** column, if it is not already selected. Close the **Recording Control** window.
5. Click **Start**, and select **All Programs, Accessories, Entertainment**, and then **Sound Recorder**. The **Sound - Sound Recorder** window appears.

 For help using Sound Recorder, click **Help** in the **Sound Recorder** window.

To adjust the volume for recording sound


You can only adjust the volume for recording in the **Recording Control** window.

1. Right-click the **Volume** icon  on the taskbar, and select **Adjust Audio Properties**.
2. On the **Audio** tab, click **Volume** in the **Sound recording** box. The **Recording Control** window appears.
3. Click and drag the **Microphone** slider up to increase volume and down to decrease volume.

¹A protruding dot located next to the Microphone jack distinguishes this jack from the Headphone jack.

Giga Pocket Personal Video Recorder

Giga Pocket Personal Video Recorder is a suite of interactive Sony audio and video components that are designed to create, capture, and play back video files derived from television and your personal videos.¹


 Giga Pocket Personal Video Recorder hardware and software applications are not available on all VAIO® computers.

¹ Unauthorized duplication of audio or video files is a violation of applicable laws.

Introducing Giga Pocket Personal Video Recorder

Giga Pocket Personal Video Recorder is a unique set of tools that enhance your VAIO® computer's capabilities. Giga Pocket gives you a wide range of video viewing, recording, and playback capabilities, such as:

- Watching and recording television programs from your computer.
- Viewing and recording TV programming simultaneously.
- Setting and managing daily/weekly timer recording schedules.
- Managing Video Capsules (recorded video contents) on your computer.
- Recording personal video content from a videotape.
- Playing your Video Capsules on other computers.
- Operating Giga Pocket functions with a remote control device.
- Sharing Giga Pocket features and functions with other computers on a network.
- Transforming Video Capsules into gMovie format for viewing on your CLIÉ handheld.

 For an explanation of Giga Pocket terms, see the [Glossary](#).

Giga Pocket Personal Video Recorder includes:

- **Giga Pocket** — This application enables you to watch TV programs on your computer's display and record them onto the hard disk drive as Video Capsules for later playback.
- **Timer Recording Manager** — The Timer Recording Manager keeps track of all TV program recordings you have scheduled. This program also enables you to modify timer recordings.
- **Timer Recording Wizard** — The Wizard interface guides you through setting up a timer recording schedule. You can program one-time recordings and set up daily or weekly recurring recording schedules.
- **Giga Pocket Explorer** — The Giga Pocket Explorer program functions as your video file management system, and stores recorded Video Capsules as well as modified Playlists. Giga Pocket Explorer contains export/import functions for file format conversions.
- **Giga Pocket Server** — The Giga Pocket Server enables multiple computers on a network to use certain Giga Pocket software functions.
- **CLiÉ Converter** — The CLiÉ Converter is a plug-in application that enables the conversion of Video Capsules into gMovie format. You can change the format your Giga Pocket contents and transfer them onto a Memory Stick® media for viewing with your Sony CLiÉ Handheld.

Accessing the Giga Pocket Help

For more information about Giga Pocket Personal Video Recorder, follow these steps:

1. Click **Start** in the Windows® taskbar and select **All Programs**.
2. Select **Giga Pocket, Help**, and click **Giga Pocket Help**.

 **Giga Pocket Personal Video Recorder maintains information about the software and Video Capsules on your computer's drive D, in a folder named D:\Giga Pocket V5. This folder and its contents are not designed for your direct maintenance. Please do not move, modify or delete the Giga Pocket Folder or any of its contents. Any alteration to this folder or its contents may cause your Giga Pocket software and Video Capsules to stop working properly.**

About Giga Pocket Personal Video Recorder

The information in this section provides guidelines to follow when using Giga Pocket Personal Video Recorder.

Display setup

Always set up your display as follows when you use Giga Pocket:

- Color quality: Use factory default settings (32-bit).
- Screen resolution: Use the factory preset screen resolution setting. Using other display settings may cause an improper screen image or an incorrect recording by Giga Pocket software.
- Check your display setup in the Microsoft® Windows® operating system before starting up Giga Pocket software. For more information, refer to the operating system manual.
- Do not change the display setup while Giga Pocket is running, or your system may operate improperly.

Hard disk drive

- When the available free space on your hard disk approaches 100 MB, you are not able to create a new Video Capsule. Delete unnecessary Video Capsules or files in order to increase available space on your hard disk drive.
- If you directly delete, move, or rename a file in the D:\Giga Pocket V5 folder, Giga Pocket Personal Video Recorder features may not work properly.

Network

- Microsoft® Windows® XP operating system supports a single Giga Pocket user at any given time. Even if a different user logs on using the Fast User Switching feature, Giga Pocket is not available to any other user account. For more information, see the Giga Pocket Help.
- Microsoft Windows XP operating system supports a single Giga Pocket user at any given time. If a different user logs on using the Fast User Switching feature, the Timer Recording feature is not available to another user account. The Timer Recording Manager icon appears in the task tray of the 1st user to log on.

Glossary

The most common terms for Giga Pocket Personal Video Recorder software are defined below.

Cabinet A cabinet acts as a container for Video Capsules in Giga Pocket Explorer. A network cabinet is located on other computers in a network environment.

CATV Refers to Community Access Television, otherwise known as cable television.

Clip A clip is a Video Capsule when it is stored in a Playlist.

Cut A cut is a selected scene taken from a previously recorded Video Capsule.

Expiration date A Video Capsule is stored on the hard disk drive for a preset period of time. When this time has expired, the Video Capsule is automatically deleted.

Film roll During Video Capsule playback, a snapshot view of the scenes are captured on a film roll. You can scroll freely through the film roll to view different scenes.

GOP Group of Pictures (GOP) are the smallest unit of measure for the images captured on a Video Capsule. A single GOP is approximately 0.5 to 1 second in length.

HotSync® Registered trade name for the method of linking between a handheld device and a larger computer, such as a desktop or notebook computer.

Management information Management information contains the creation date of Video Capsules and their thumbnails. This information is required for preview.

MPEG file extension. A file that contains compressed moving pictures using the MPEG standard, with .mpg as the file name extension.

Safety Tab Removing the safety tab from a Video Capsule prevents accidental erasing of your video data.

Slip play This feature allows you to view delayed video playback. While your recording is in progress, you are able to view the recording from the beginning.

Snapshot A snapshot is a miniature view displayed on the film roll in Giga Pocket, Playlist Builder, and the preview monitor in Giga Pocket Explorer.

Stand by mode Stand by mode is a power saving mode that is set up by using the Windows® operating system. Your computer stays in this power saving mode until approximately 5 minutes before the timer recording is due to begin.

STB Refers to set-top box, otherwise known as a cable box.

Thumbnail A thumbnail is a miniature view on recorded Video Capsules or in playback by Giga Pocket. The main thumbnail is displayed in calendar view or in the Giga Pocket Explorer list area.

Timer recording A timer recording is a preset video recording event.

Video Capsule A Video Capsule is a virtual container that holds the video images recorded with Giga Pocket Recorder. A Video Capsule is created on your computer hard disk drive and managed with Giga Pocket Explorer.


Accessing the Giga Pocket Help

For more information about Giga Pocket, follow these steps:

1. Click **Start** in the Windows taskbar and point to **All Programs**.
2. Point to **Giga Pocket**, point to **Help**, and then select **Giga Pocket Help**.

Setting Up Giga Pocket Personal Video Recorder


This section illustrates how to set up the cables and connections for your Giga Pocket Personal Video Recorder system.

 The hardware configuration of your computer may vary from the illustrations shown. To view the specific hardware configuration for your computer, see the online specifications sheet.

To set up TV connections

The best method of connecting your computer system, TV monitor or display, and cable service access, depends on the type of cable connection available in your home.

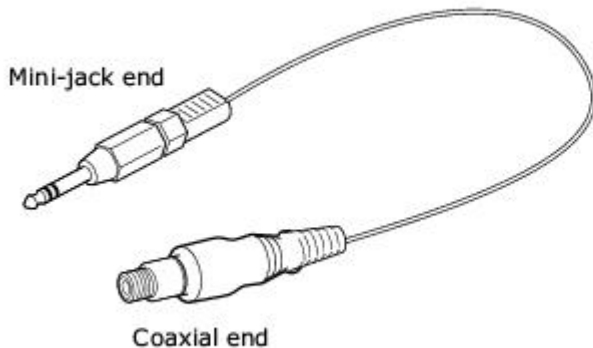
TV signal reception strength will vary widely depending on service availability in your area as well as the type of connection available. Using a splitter, for example, to set up a TV connection is one available option. Use of a splitter may reduce TV signal reception strength.

 Your VAIO® Computer is supplied with certain audio and video cables. Depending on your in-home cable access, you may require extra cables, adapters or connection equipment not supplied with your computer.

The TV coaxial converter cable

One primary cable to connect your computer to a TV cable or antenna is the TV coaxial converter cable (supplied with computers featuring GigaPocket). The mini-jack end connects to the computer's VHF/UHF port, whereas the coaxial end connects to the cable service access or antenna

TV coaxial converter cable

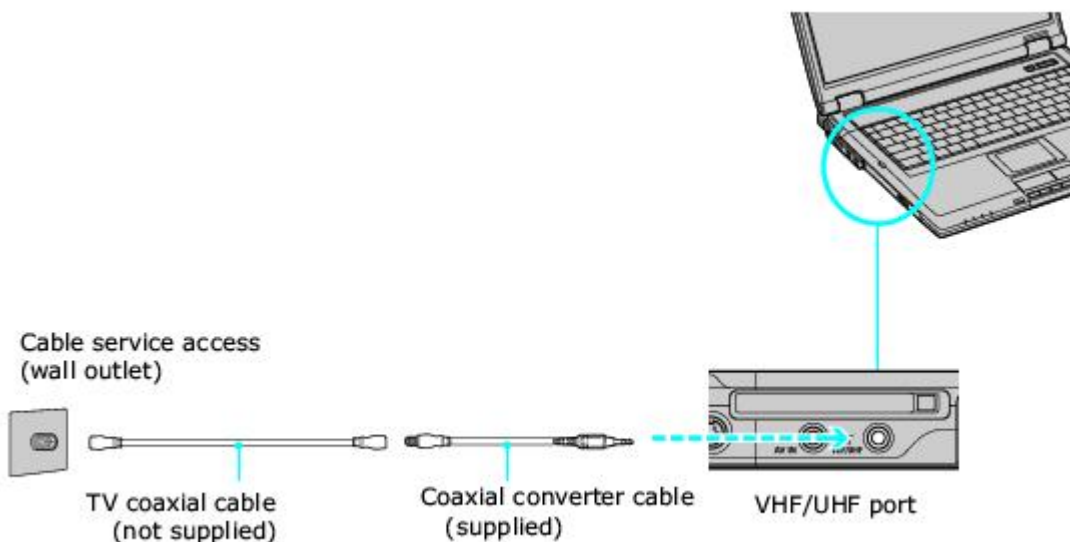


Connecting to standard cable access (CATV)

Option 1

1. Connect one end of a TV coaxial cable (optional) to your cable service access. Connect the other end to the coaxial converter cable (supplied).
2. Connect the mini-jack end of the coaxial converter cable to the VHF/UHF port on the back panel of your computer.

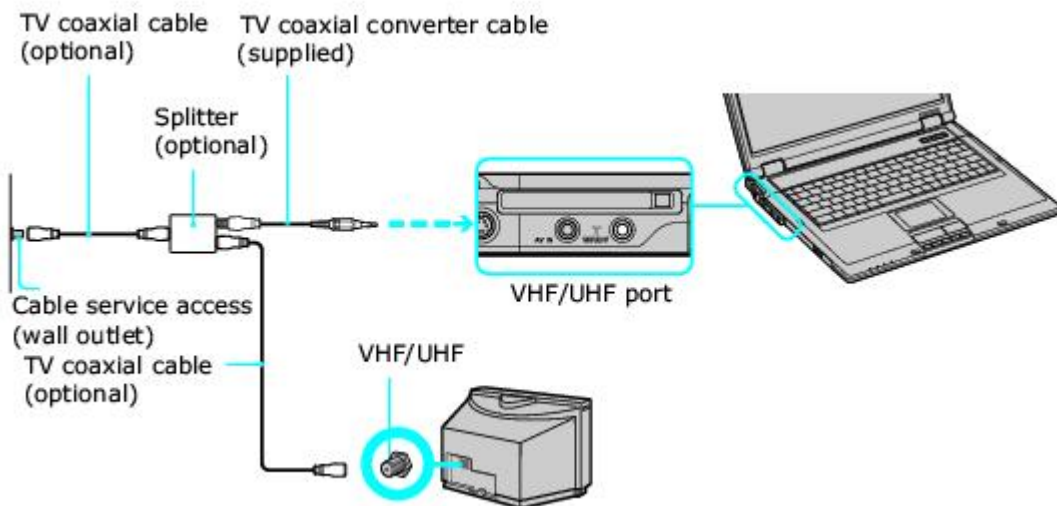
To connect in CATV mode (Option 1)



Option 2


1. Connect one end of a TV coaxial cable (optional) to your cable service access. Connect the other end to the single-connection end of a splitter adapter.
2. Connect the TV coaxial converter cable (supplied) to the double-connection end of the splitter adapter. Connect the other end to the VHF/UHF port on the back panel of your computer.
3. Connect a third TV coaxial cable (optional) to the double-connection end of the splitter adapter. Connect the other end to the VHF/UHF port on the rear of your TV monitor or display.

To connect in CATV mode (Option 2)



Connecting to a standard antenna (air)

You can connect your Giga Pocket system to an indoor/outdoor antenna system, using Option 1 or 2 from the previous section, [Connecting to standard cable access \(CATV\)](#). Depending on the type of antenna system in your home, your connection may require a VHF/UHF RF combiner/transformer (optional) to connect your computer and the indoor/outdoor antenna system.

 If you are connecting to an indoor/outdoor antenna, you may need to reorient the antenna for best reception. Move the antenna cable away from other power sources or connectors to reduce reception interference.

Option 1

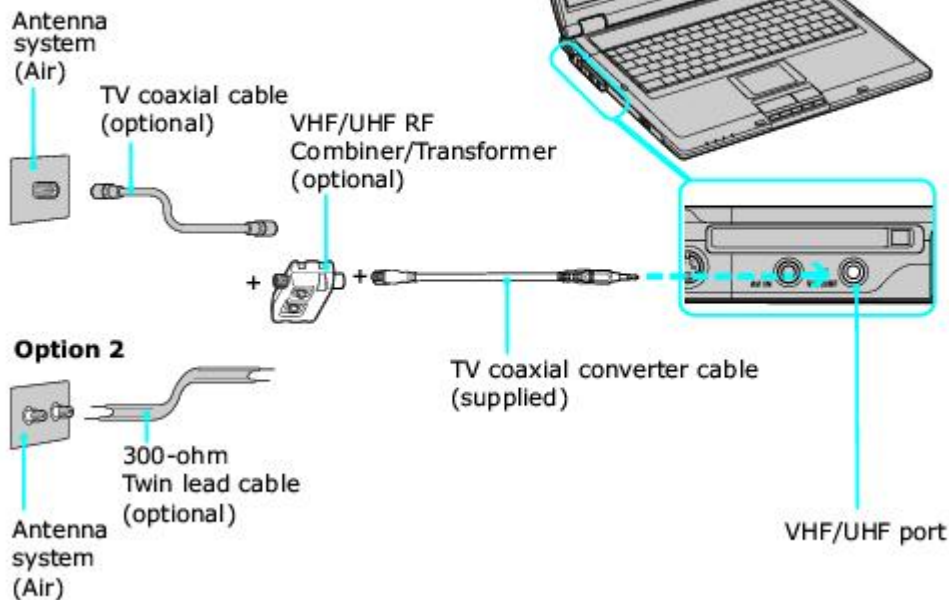
1. Connect one end of a TV coaxial cable (optional) to your antenna outlet. Connect the other end to a VHF/UHF RF combiner/transformer (optional).
2. Connect the TV coaxial converter cable (supplied) from the combiner/transformer to the VHF/UHF port on the back panel of your computer.


Option 2

1. Connect both ends of the antenna's twin lead cable to the screw-type grips on the combiner/transformer.
2. Connect the TV coaxial converter cable (supplied) from the combiner/transformer to the VHF/UHF port on the back panel of your computer.

To connect in standard antenna mode (air)

Option 1



 Your VAIO® Computer is supplied with certain audio and video cables. Depending on your in-home cable access, you may require extra cables, adapters or connection equipment not supplied with your computer.

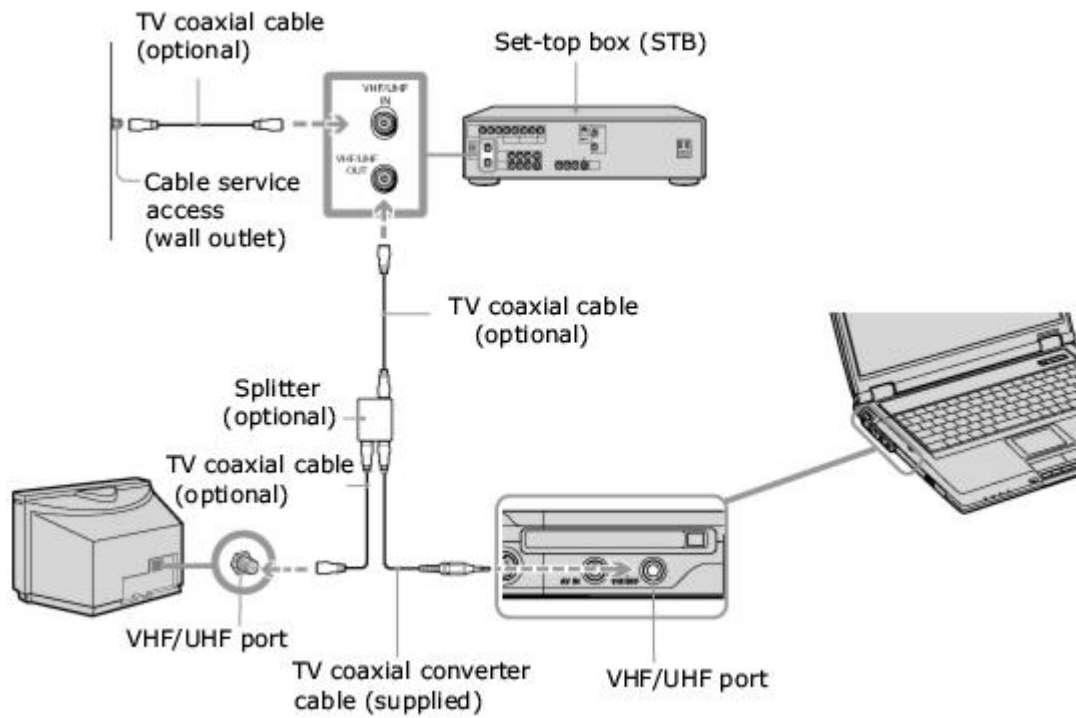
Connecting with a cable or satellite set-top box (STB)

You can connect your Giga Pocket system to cable service access that uses a set-top box (cable or satellite).

Option 1

1. Connect one end of a TV coaxial cable (optional) to your cable service access. Connect the other end to the In jack on the back panel of your set-top box (STB).
2. Connect a second TV coaxial cable (optional) to the Out jack on your STB. Connect the other end to the single-connection end of a splitter adapter (optional).
3. Connect the TV coaxial converter cable (supplied) to the double-connection end of the splitter adapter. Connect the other end to the VHF/UHF port on the back panel of your computer.
4. Connect a fourth TV coaxial cable (optional) to the double-connection end of the splitter adapter. Connect the other end to the VHF/UHF port on the rear of your TV monitor or display.

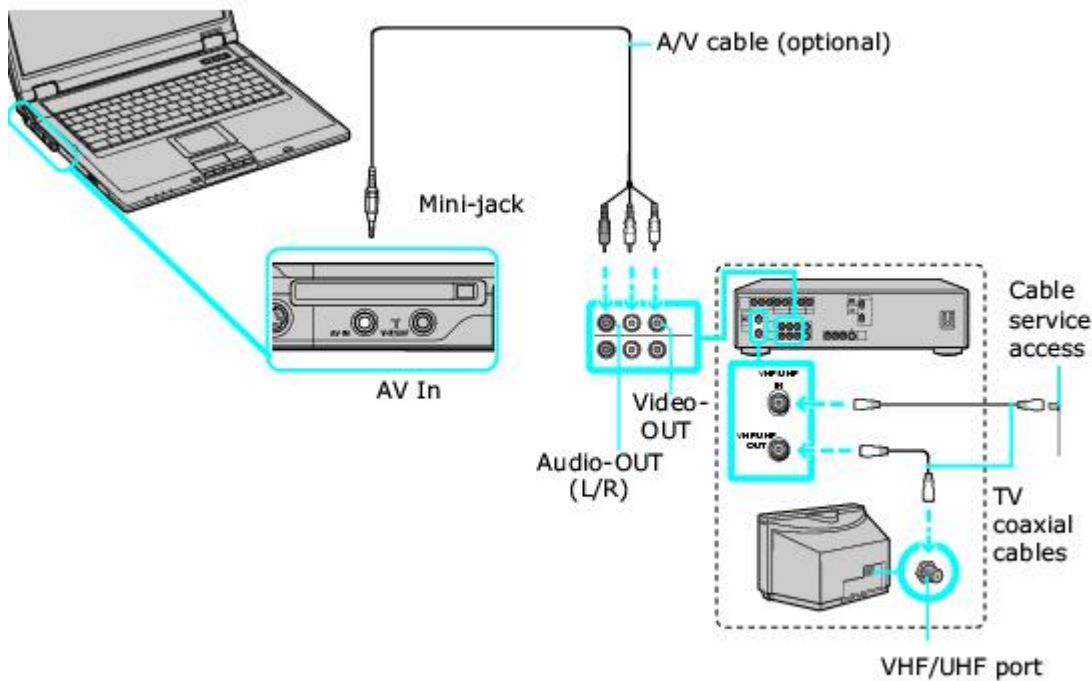
To connect in STB mode (Option 1)



Option 2

1. Connect one end of a TV coaxial cable (optional) to your cable service access. Connect the other end to the In jack on the back panel of your set-top box (STB).
2. Connect a second TV coaxial cable (optional) to the Out jack on your STB unit. Connect the other end to the VHF/UHF port on the rear of your TV monitor or display.
3. Connect one end of the stereo A/V cable with triple RCA jacks (optional) to the Video Out and Audio-OUT (L/R) jacks on the back panel of your STB unit, matching the plug and jack colors.
4. Connect the mini-jack end of the A/V cable into the AV In jack of your computer.

To connect in STB mode (Option 2)



To set up additional equipment

This section illustrates how to set up additional equipment with the Giga Pocket Personal Video Recorder System.

Connecting a VCR or camcorder with an audio cable

Your VAIO® computer has both audio and video connection capability. You can locate the connections behind the bottom panel on the front of the system unit. You can connect a VCR or camcorder, using the audio jacks and video ports.

1. Connect a dual audio cable (optional) to the L and R audio jacks, located on the either the front or rear panels of your computer.
2. Connect the other ends of the dual audio cable to your VCR or camcorder.

Connecting equipment with an S-video or video cable

Your VCR or camcorder may have either standard video or S-video connection capability.

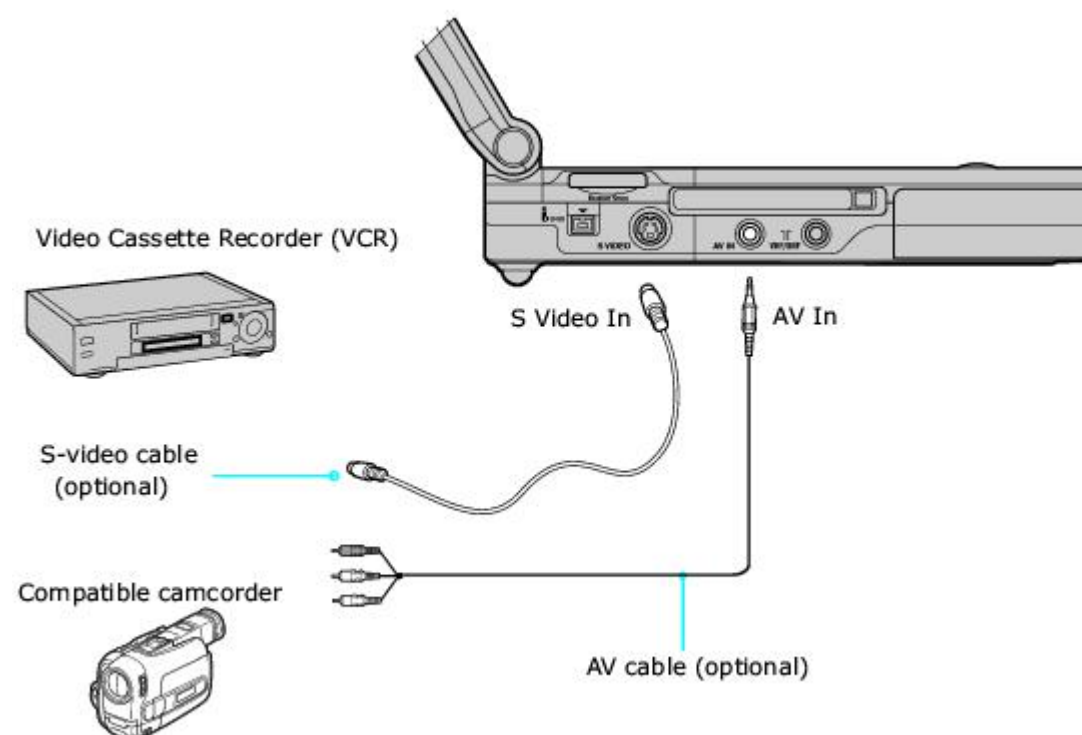
Option 1

1. Connect an S-video cable (optional) directly into the S-video jack on your computer.
2. Connect the other end of the S-video cable into the appropriate port on your compatible VCR or camcorder.
3. Connect an audio cable with double RCA plugs at each end (optional) into the composite audio L and R jacks.

Option 2

1. Connect the mini-jack end of an A/V cable with triple RCA plugs at the other end (optional) directly into the AV In jack of your computer.
2. Connect the other ends of the A/V cable into the appropriate jacks on your compatible VCR or camcorder.

To connect a VCR or camcorder



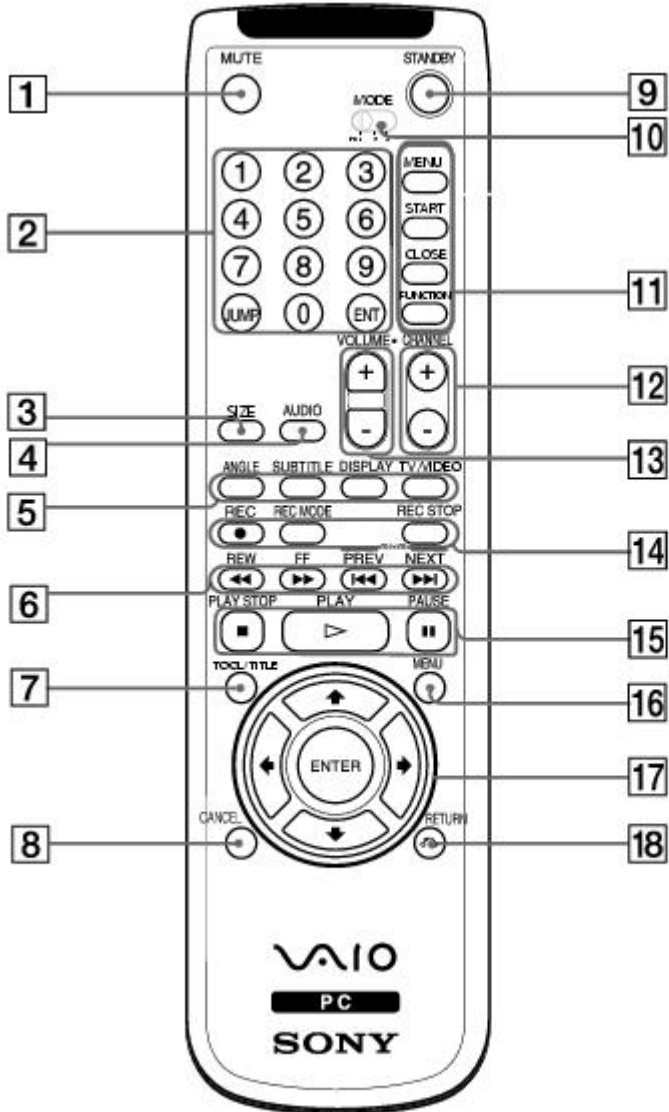
Connecting the GigaPocket Remote Control

Your computer also features a remote control and an infrared (IR) remote control receiver. The IR remote control receiver must be plugged into one of the computer's USB ports in order to receive the signals from the remote control.

About the Remote Control

GigaPocket Personal Video Recorder features are controlled with the remote control. The remote control can start and stop video recording and playback, select channels, and set viewing preferences. This section describes the basic functions of your remote control.

Remote Control



1 MUTE button

Press to turn off the sound. Press again to restore the sound.

2 Channel number buttons (1-9)

Press to select specific channels.

(Press the ENT button to activate channel selection.)

JUMP button

Press to go to the previous channel. Press again to return to the current channel.

ENT button

Press to activate channel selection. See **Channel number** buttons.

3 SIZE button

Press to view the current software in full-screen size. Press again to return the view to its original size.

4 AUDIO button

Press to view available sound mode options on the monitor/display.

5 DVD angle button

Press to change the camera angle during DVD playback. See the DVD player software for details. This function is not available for other software.

DVD Subtitle button

Press to turn on/off subtitles or to change the subtitle language during DVD playback. See the DVD player software for details. This function is not available for other software.

DISPLAY button

During DVD playback in full screen mode, press to show the settings window.

When using Giga Pocket software, press to display the TV/Recording deck and playback deck screens. Press again to hide these views.

TV/VIDEO button

Press to change the on-screen image from the TV/Recording deck to external video equipment, such as your VCR.

(Note: You cannot change the input source while recording.)

6 REW and FF buttons

Press to rewind or fast-forward.

PREV and NEXT buttons

Press to move back to the previous screen or forward to the next screen.

7 TITLE button

The function of this button may vary between DVDs. See the DVD player software instructions for details.

8 CANCEL button

When using Giga Pocket software, press to close an error message dialog box. The window returns to its original size when displayed in full-screen mode.

(Note: This function is not available for other software.)

9 STANDBY button

Press to place the system into Stand by mode.

(Note: You cannot place the computer into Stand by mode when certain Giga Pocket functions are running.)

10 MODE switch

Set the switch from **1** to **3**, to change the remote control's control between computers. The target computer's remote control software determines the assigned number.

(Note: The default setting is **1**, if you are using a single computer.)

11 MENU button

Press to view a shortcut menu of available software applications. Press again to hide this menu.

(Note: For Giga Pocket software, the **Select Video Capsules** window displays. Press the button again to hide this window.)

START button

Press to start the selected software.

CLOSE button

Press to close the current software.

FUNCTION button

When Giga Pocket software is selected with the **Menu** button, press to switch from the TV/recording deck to the playback deck.

When using SonicStage software, press to change from the music drive (hard disk drive) to the CD.

12 CHANNEL button

Press to change channels automatically (no number input required).

(Note: This function is available for Giga Pocket software only.)

13 VOLUME button

Press to raise or lower the volume.

14 REC button

Press to begin recording.

REC MODE button

Press to select the recording mode.

REC STOP button

Press to stop recording.

(Note: The REC, REC MODE, and REC STOP functions are available for Giga Pocket software only.)

15 PLAY STOP button

Press to stop playback.

PLAY button

Press to begin playback.

PAUSE button

Press to pause playback.

16 MENU button

Press to display the root menu during DVD playback. Press again to minimize the window. See the DVD player software for details.

When using Giga Pocket software, press to display Video Capsule listings.

When using SonicStage software, press to display Playlists.

When using VAIO Media software, press to display the main menu.


17 Direction and ENTER buttons

Press a direction arrow to navigate through menus. Press ENTER to select.

18 RETURN button

Press to return to the previous screen.

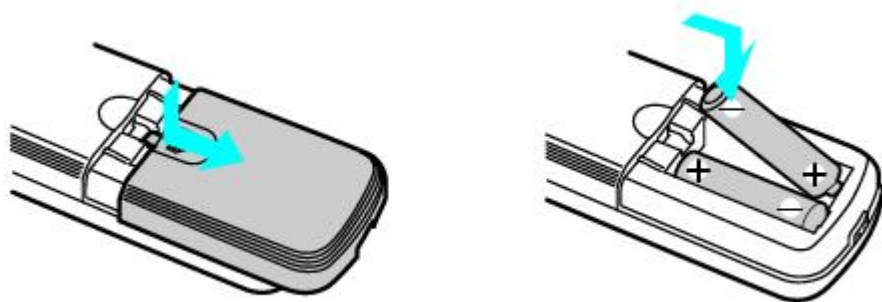
(Note: This function is not available for Giga Pocket software.)


 For more details about the function buttons on your remote control, see the Giga Pocket Help.

To set up the remote control

Insert two AA batteries (supplied) into the remote control as shown.

Inserting batteries into the remote control



 Under normal use, the AA batteries may last up to six months. If your remote control does not operate properly, the batteries may need to be replaced.

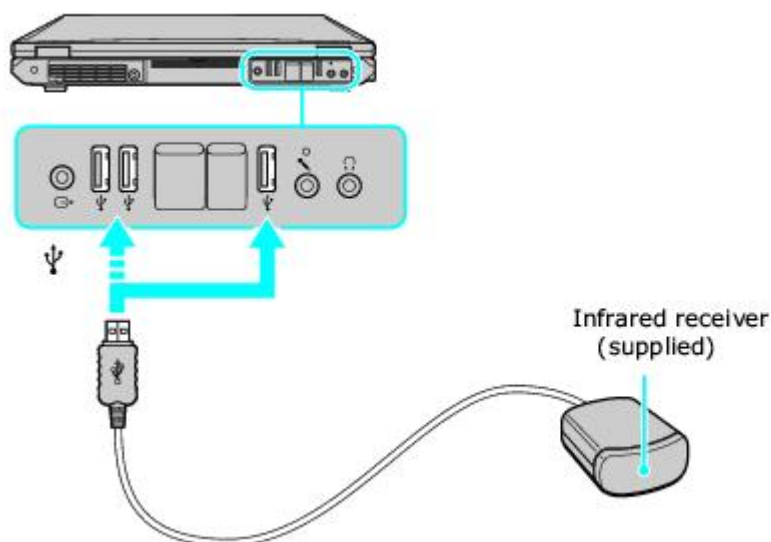
If your remote control is not being used for extended periods of time, remove the batteries to avoid possible damage from battery leakage.

Connecting the infrared receiver

1. Connect the infrared receiver cable to a USB port located on either the front or back panel of your computer.
2. Place the infrared receiver unit in a position that enables it to communicate with your remote control.

 The infrared receiver must be visible in a line-of-sight with your remote control in order to function properly.

Connecting the infrared receiver (back panel)




Using the TV Tuner

Certain models are equipped with a TV tuner, which enables you to watch and record television with the help of the GigaPocket software.

The TV On button will launch GigaPocket and its TV viewing/recording capabilities.

How to use the TV button

1. Locate the TV button below the touch pad and press the button once.
2. The GigaPocket window appears on the screen.

 You must connect your computer to a television cable or antenna in order to view television with GigaPocket.

Using the TV button



Setting Up Giga Pocket Software

Giga Pocket Personal Video Recorder software features and functions are detailed in this section, enabling you to begin viewing or recording TV programs.

To set up TV viewing

When you start Giga Pocket Personal Video Recorder for the first time, you are automatically prompted to set the video input source for watching TV or cable TV (CATV) programs on your computer.

Starting Giga Pocket for TV Setup (For first time setup)

1. Verify that the computer time and date settings as displayed in the taskbar are correct.

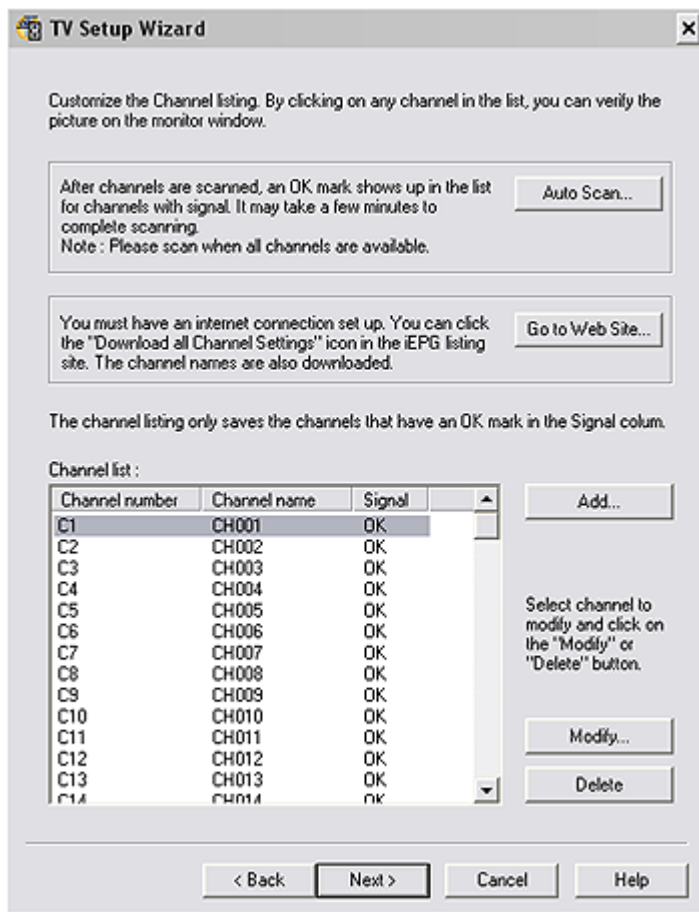
To adjust these settings:

1. Right-click with your mouse. A shortcut menu appears.
2. Select **Adjust Date/Time**, and a dialog box appears.
3. Correct the date and time, if necessary.

2. Click **Start** in the Windows taskbar, point to **All Programs**, point to **Giga Pocket**, point to **All Software**, and then click **TV Setup**.


The **TV Setup Wizard** appears.

TV Setup Wizard



3. Depending on your cable service access, select **Standard CATV**, **Standard antenna**, or **set-top box (STB)**.

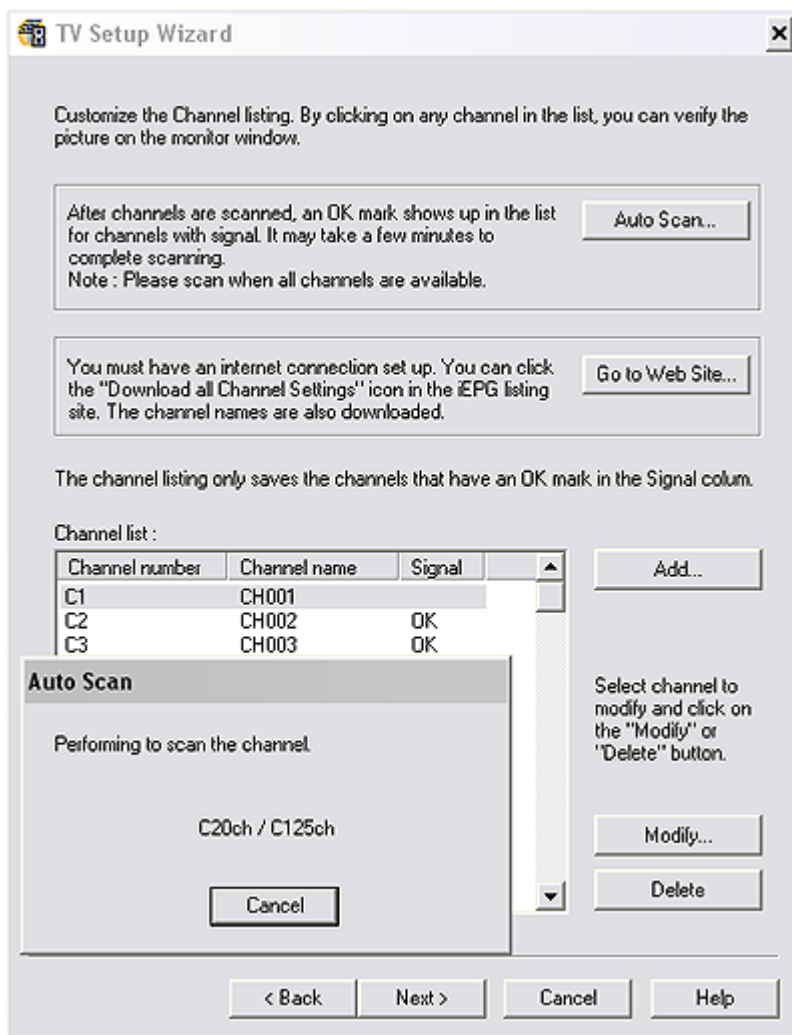
1. Standard CATV (C1-C125) without STB — For this connection, you must use a coaxial cable directly (without an STB) to your computer. The default setting for this connection option is STD. Depending on your local connection requirements, HRC and IRC are also available.
2. Standard antenna (2-69) — Select this option if you connect an aerial antenna's coaxial cable directly to your computer for watching TV programs.
3. STB (Set top box) — Select this option if the broadcast signal is received from a set top box (STB) such as a digital cable box or a satellite cable box. Make sure that the Input channel on your STB (Ch. 3, Ch. 4, etc.) matches the Input channel listed in the Giga Pocket TV Setup dialog box.

 If you are not sure of the type of cable connection to use (Standard, HRC, or IRC), contact your cable provider for information.

- Click **Next**. The wizard displays a dialog box that enables you to customize the channel listings.
- Click **Auto Scan**.

You can view the channel reception in the pop-up **TV Setup - Monitor** window.

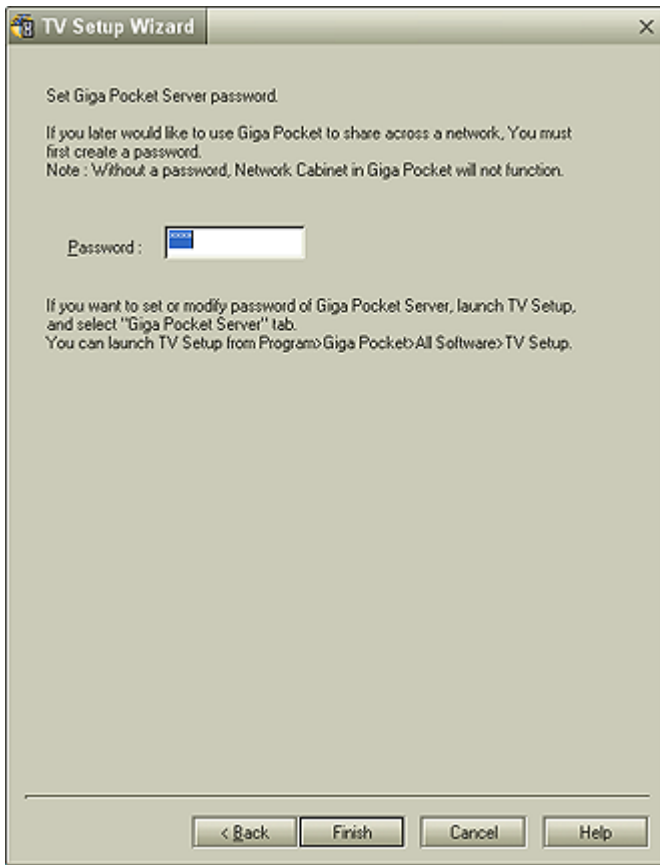
TV Setup Wizard - Customize the channel listing



If your computer is connected to the Internet, you can click **Go to Web Site...** and download channel listings from the iEPG listing site.

- Connect to the Internet.
- Click **Go to Web Site...** and download channel listings by clicking **Download all Channel Settings**.
- Click **Next**. For the first time setup, you are prompted to set your Giga Pocket Server password.

TV Setup Wizard - Giga Pocket Server password




9. Type in a password and click **Finish**.

Setting up your display (monitor)

When using Giga Pocket Personal Video Recorder, set your display settings as follows:

- **Colors** — Use the default factory settings (32-bit).
- **Screen area** — Use the default factory settings.

If you change the default settings, you may experience poor image quality on your display.

 Microsoft® Windows® XP operating system supports a single Giga Pocket user at any given time. Even if a different user logs on using the fast switch feature, Giga Pocket is not available to any other user account. For more information, see the Giga Pocket Help.

Giga Pocket


Giga Pocket enables you to watch a TV program on your computer display while recording it onto your hard disk drive. Using the Giga Pocket Slip Play feature, you can view a program from the beginning even while it is being recorded.

Starting Giga Pocket

1. Click **Start** in the Windows® taskbar, point to **All Programs**, point to **Giga Pocket**, then click **Giga Pocket**. The Giga Pocket window appears.

Giga Pocket window

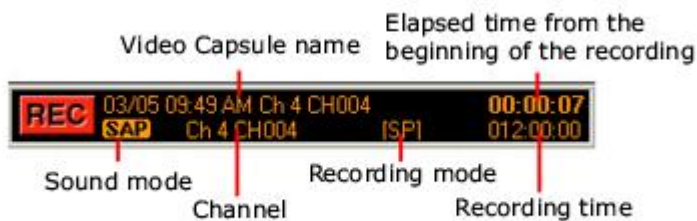


 The current television broadcast is displayed, based on the selected channel.

Using the TV/Recording deck and Playback deck

Giga Pocket features two decks on the main interface window: the TV/Recording deck and the Playback deck.

TV/Recording deck (detail)




Use the TV/Recording deck to view programs and record Video Capsules. You can use the Playback deck of your Giga Pocket to play back a prerecorded Video Capsule.



Playback deck (detail)



Recording a Video Capsule

Giga Pocket stores recorded images as Video Capsules. The Video Capsules provide file recording information, which can be viewed through Giga Pocket Explorer. Manage your Video Capsules with Giga Pocket Explorer.

 You cannot record a program into a previously recorded Video Capsule. All new content is recorded into a new Video Capsule.

1. Select your program by switching to the appropriate channel. Use the channel buttons located at the bottom of the Giga Pocket window, or use the right and left direction arrows on your keyboard.
2. Click **Record** , located at the bottom of the window, to begin recording your Video Capsule.
3. When your program has completed or you wish to end the Video Capsule, click **Stop** .

 To pause your recording session, click **Pause** . Click on it again to resume recording.

Using the Slip Play feature

While a program is being recorded on the TV/Recording deck, you can watch that same program from the beginning, using the Playback deck. You can begin using Slip Play to view your recording, beginning approximately ten seconds after your recording session begins.

1. From the menu bar, click **Functions**.
2. Select **Start Slip Play**.

Additional information about Giga Pocket

- Giga Pocket can be used for external video recording. Depending on conditions, not all video images can be recorded or displayed.
- Video input from game consoles may not be recorded or displayed in Giga Pocket.
- When you input an image from a video player device, such as a VCR that is connected to your computer, the following images may not record or display:
 - The still images of a paused playback screen.
 - A screen without images, such as a blue screen.
 - The menu screens of the attached video player device.
- The Giga Pocket software's displayed image or images from a prerecorded Video Capsule may be interrupted or distorted under the following circumstances:
 - If you change the channel on an attached video player device.
 - If you switch input during the analog input from an attached video player device.
 - If you attempt to play back a damaged video tape.
 - If you press **Pause** during the recording process.
- When you play a Video Capsule for a few seconds from the end of the film roll using the scroll bar, you may not be able to see a displayed image.
- The computer's response may decrease when you attempt to play a Video Capsule while recording a TV program using Giga Pocket.

Giga Pocket may interrupt or stop playback to allocate system resources for the timer recording event, if there are other applications running simultaneously. If this occurs, wait until Giga Pocket finishes recording before playing the Video Capsule.


- The timer recording may fail due to an "Event buffer of audio overflow" error in the following circumstances:
 - The input cable (coaxial or video cable) is disconnected after recording starts.

- You record a TV channel that has no broadcast content.
- You record video content from an old video tape with poor signal quality.
- The on-screen display may shift and split under some circumstances. If this occurs, switch the TV/Recording deck and the playback deck, or switch the channel. The recording proceeds even if the on-screen display shifts.
- Giga Pocket does not operate properly if used concurrently with other video applications, such as DVgate or MovieShaker software.

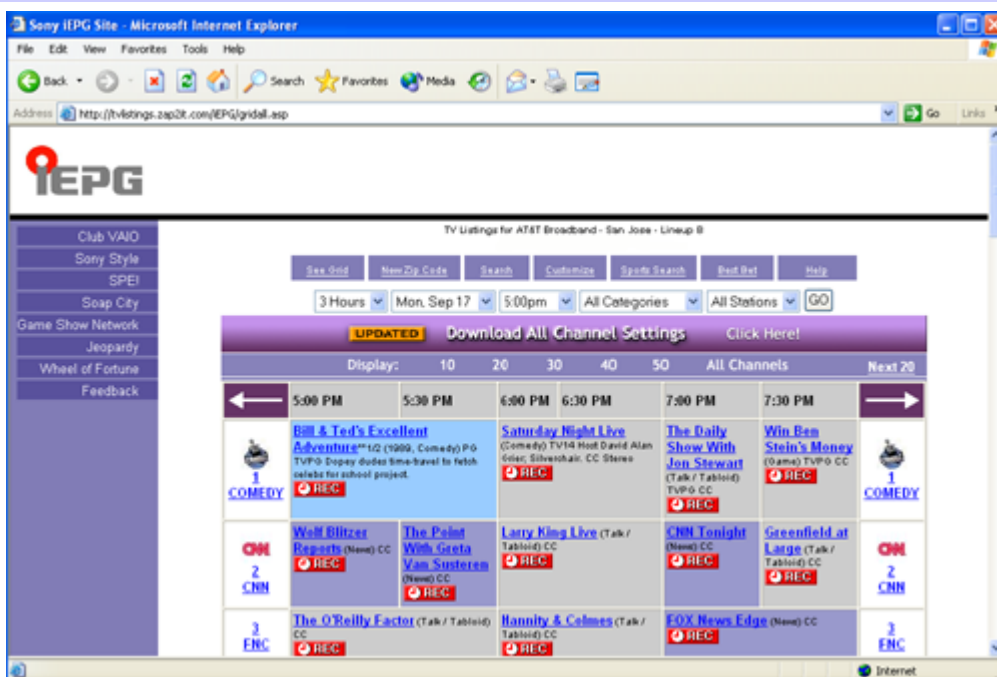
Using the TV Program Web site

1. Click **Start** in the Windows taskbar, point to **All Programs**, point to **Giga Pocket**, and then select **Zap2it**.

You can also go directly to the Web site at <http://www.sony.com/vaiotv>.

 Timer Recording requires an Internet connection. See the section, [To set up your Internet Electronic Program Guide service](#), for information on setting up for first-time use.


Internet Electronic Program Guide Web site



The appearance of the online channel guide Web site, its contents, and the accuracy of the TV listings are controlled by the TV listing provider and may change without notice. Pay-per-view channels can be accessed when making payments directly to the appropriate TV program provider.

You can schedule up to 100 timer recordings using Giga Pocket Personal Video Recorder.

From the online channel guide, click on the **REC** icon  to select the program you wish to record. The Timer Recording Wizard begins and the **New Timer Recording - Set Channel and Start Date and Time** window appears.

 Timer recordings create virtual containers for the recorded content that are called Video Capsules.

Accessing the Giga Pocket Help

For more information about Giga Pocket Personal Video Recorder, follow these steps:

1. Click **Start** in the Windows® taskbar and select **All Programs**.
2. Select **Giga Pocket, Help**, and click **Giga Pocket Help**.

Timer Recording Wizard

With the Timer Recording Wizard, you can set, adjust, and cancel the timer recording settings.

Using the Timer Recording Wizard

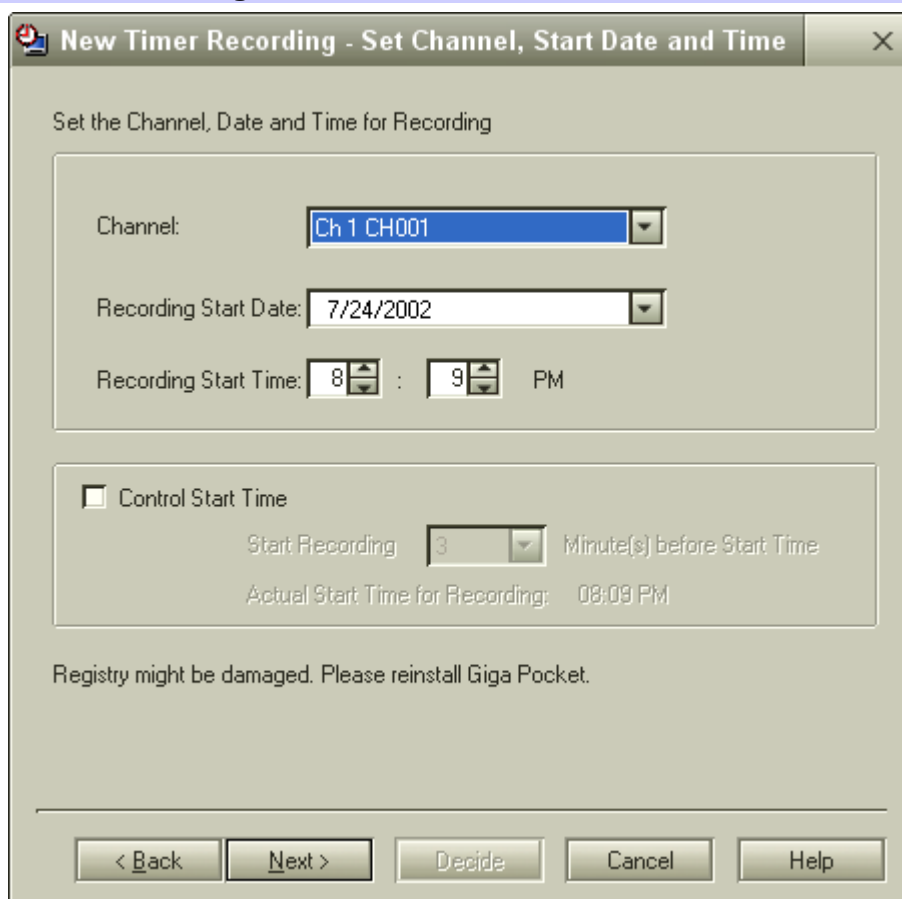
1. Click **Start** in the Windows taskbar, select **All Programs**, then select **Giga Pocket**.
2. Select **Timer Recording Wizard**. The Timer Recording Wizard dialog box appears.

Timer Recording Wizard



3. Select the desired option from the **Select Timer Recording Settings** menu and click **Next**. Follow the on-screen instructions. Click **Help** for assistance.

New Timer Recording - Set Channel and Start Date and Time



4. Verify that the information is correct and click **Next**. The programming station and time information is

automatically programmed into the appropriate Timer Recording Wizard fields.

5. You can set the stop time for your timer recording and select the recording mode. The stop time is automatically programmed into the Timer Recording Wizard. Verify the stop time, choose a recording mode, and then click **Next**.

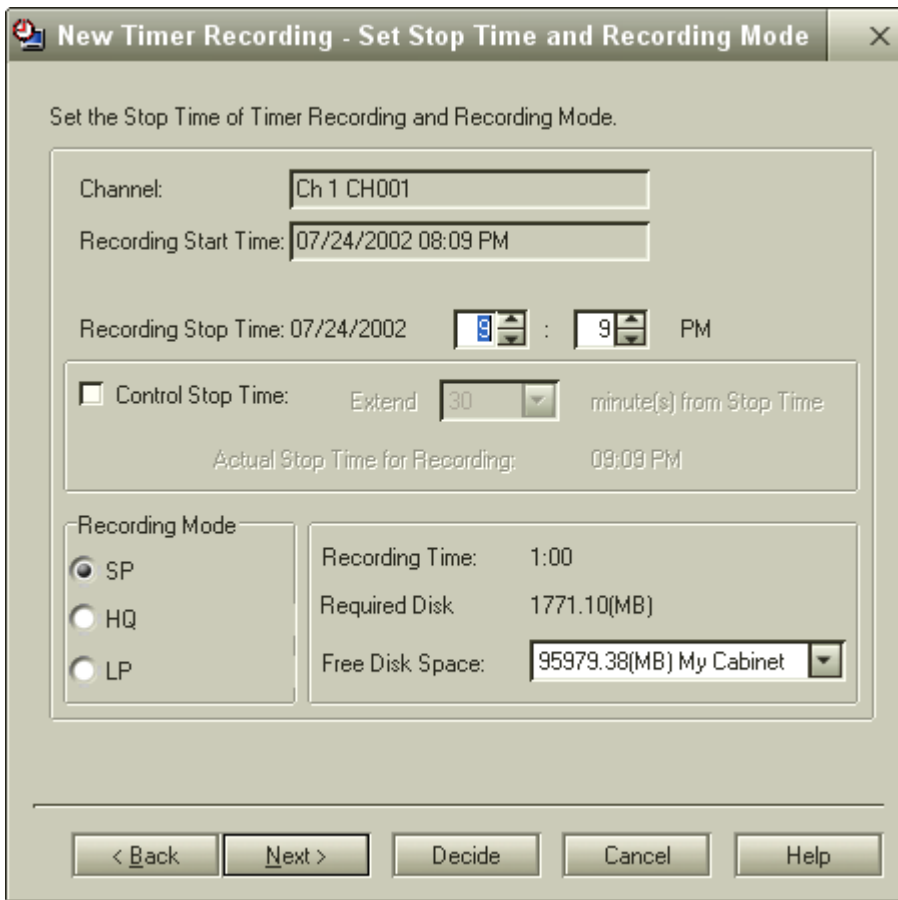
Recording Mode	Description
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Standard Play (SP)	Standard recording mode (MPEG-1, MPEG-2, and AVI).
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High Quality (HQ)	Image quality is improved, but recording requires more space on the hard disk drive as compared to using SP or LP recording modes (MPEG-1, MPEG-2, and AVI).
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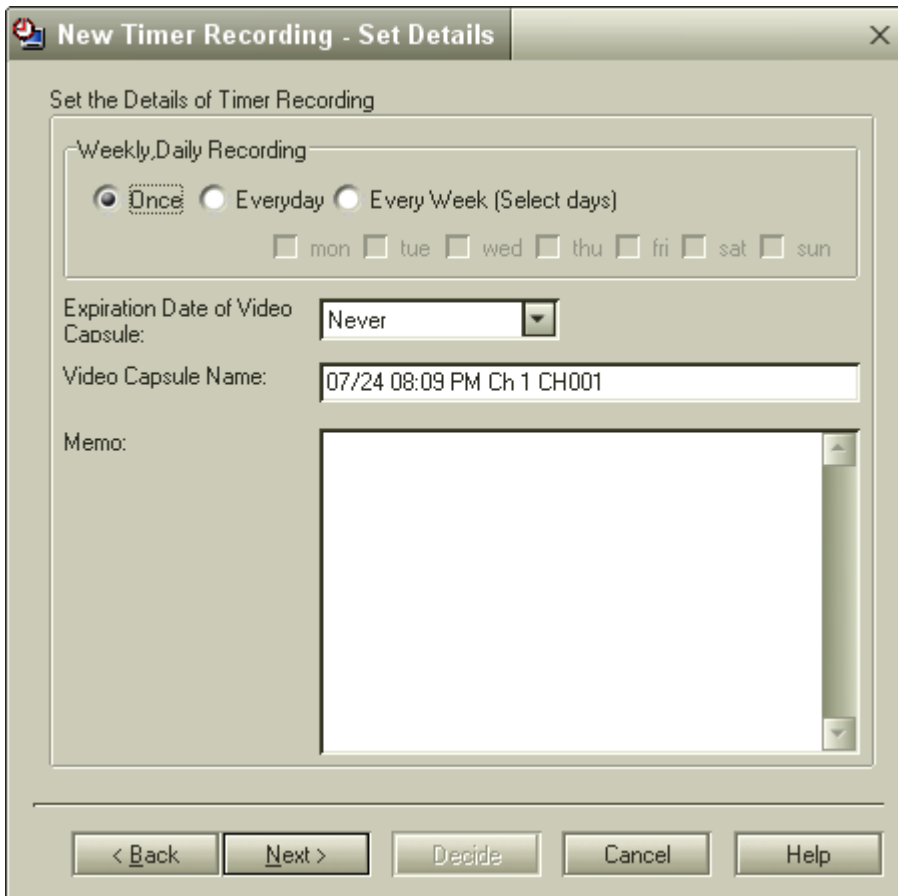
Long Play (LP)	Image quality is reduced, but recording requires less space on the hard disk drive as compared to using HQ recording mode (MPEG-1).
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New Timer Recording - Set Stop Time and Recording Mode




6. From the New Timer Recording - Set Details dialog box, you can customize the timer recording schedule. Select how often you want to record the program.

New Timer Recording - Set Details

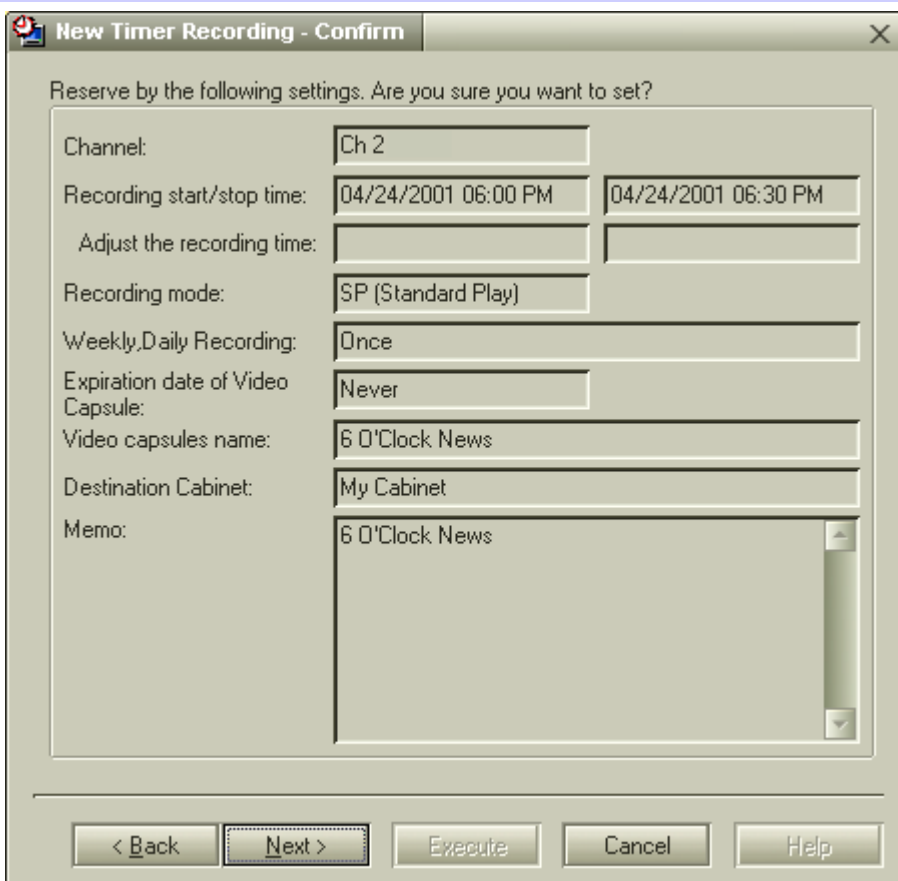


7. Select a date for the recorded program to be automatically deleted from your hard disk drive, using the Expiration date of Video Capsule drop-down list.

 To maintain adequate space on your hard disk drive, Giga Pocket Personal Video Recorder enables you to set an expiration date for your Video Capsules to be automatically deleted.

8. Click **Decide** to review your setting preferences. The New Timer Recording - Confirm dialog box appears. Click **Next**.

New Timer Recording - Confirm



9. The New Timer Recording - Completed dialog box appears. Click **Finish**.



Additional information about the Timer Recording Wizard

- Timer recording requires approximately 30 seconds (pre-recording) preparation time prior to beginning each recording session. Please keep this in mind when setting up multiple, back-to-back recording sessions. Giga Pocket software stops the current timer recording, pauses to prepare, and then begins the next timer recording according to the set start time. The length of your first Video Capsule is approximately 30 seconds shorter than the actual time set.

You may experience some timing problems with multiple recording sessions when the second timer recording is preset as a daily or weekly recorded event. The first timer recording may end as early as 60 seconds sooner than the set stop time.

- Scheduled daily or weekly timer recording sessions do not occur if your hard disk drive does not have sufficient space. Giga Pocket software does not allow a new Video Capsule to be created if there is less than 100 MB of free space on the hard disk drive. These scheduled events resume at their scheduled time, as hard disk drive space becomes available.
- Approximately three minutes before Giga Pocket begins a timer recording and during a timer recording, you must avoid:
 - Starting up or using other software applications.
 - Setting up, changing, or deleting timer recordings.
 - All activities that may access the hard disk drive, such as copying files.


Accessing the Giga Pocket Help


For more information about Giga Pocket Personal Video Recorder, follow these steps:

1. Click **Start** in the Windows® taskbar and select **All Programs**.
2. Select **Giga Pocket, Help**, and click **Giga Pocket Help**.

Timer Recording Manager

The Timer Recording Manager keeps track of all scheduled TV recordings. Your computer settings, by default, are set to start Timer Recording Manager automatically when the computer is turned on.

Timer recordings are being performed when the Timer Recording Manager icon  (Timer Recording Manager) is visible in the Windows taskbar. The timer recording does not start unless the Timer Recording Manager application is available. For the Timer Recorder Manager application to be available, your computer should be in Stand by or Hibernate mode, if the system is not in active use. You can schedule up to 100 programs at a time, for timer recording with the Timer Recording Manager.

 Microsoft® Windows® XP operating system supports a single Giga Pocket user at any given time. If a different user logs on using the fast switch feature, the Timer Recording feature is not available to another user account. The Timer Recording Manager icon appears in the taskbar of the first user to log on.

Using the Timer Recording Manager

1. Click **Start** in the Windows® taskbar, select **All Programs**, select **Giga Pocket**, and then click **All Software**.
2. Click **Timer Recording Manager**. The Timer Recording Manager dialog box appears:
 - Windows Stand by button — Places the Windows operating system into Stand by mode when the preset timer recording is set to begin, or if a Video Capsule is set to expire. Windows automatically starts and performs the appropriate action.
 - Interrupt Current Recording button — Stops the current timer recording. Use this option when you wish to end the current recording session.
 - Timer Recording List — Displays a list of timer recordings that have been performed, as well as pending timer recordings. If a daily/weekly timer recording is set, only the current recording session is shown.


 The total number of timer recordings displayed does not exceed 100.

Timer Recording Manager dialog box



Double-click on a recorded timer recording to play it back on Giga Pocket.

3. Click **Hide** to restore Timer Recording Manager to the taskbar.

 If you turn off your computer, the timer recording function is disabled.

Viewing your selected program recording schedule


You can easily view the programs you have selected to record, using Giga Pocket Personal Video Recorder. The Timer Recording Manager feature enables you to change or cancel your timer recording at any time.

To view your scheduled timer recordings, follow these steps:

1. Double-click on the **Timer Recording Manager** icon  located in the Windows® taskbar.


Review your scheduled timer recordings and make any desired changes or cancellations.

2. Click **Hide** to return the icon to the taskbar.

 You do not have to be connected to the Internet to use the Timer Recording Manager feature.

Additional information about the Timer Recording Manager

- When creating a timer recording, it is important to remember the following information:
 - The timer recording function is disabled if you turn your computer off.
 - Your computer should be in Stand by or Hibernate mode, if the system is not in active use.
 - Disable screensavers and any other applications that may access your computer's hard disk drive during the timer recording.
 - If you are using a set-top box (STB), make sure it is turned on and set to the channel you want to record.
- When you set up a timer recording using Giga Pocket software, always use the Timer Recording Manager. If the Timer Recording Manager is not set up, the recording does not start, even if you set the timer recording settings with the Timer Recording Wizard.

 Your computer's default setting enables Timer Recording Manager to start automatically when the computer is started.

- The timer recording starts a few seconds earlier than the specified recording start time.
- Under certain circumstances, a daily or weekly timer recording may not be executed the second and subsequent times.
- A timer recording may fail if the computer's clock setting is changed right before the preset recording time. Before changing the computer's clock setting, verify that there are no timer recordings set to begin.

Close the Time Recording Manager before changing the computer's clock setting. Restart Timer Recording Manager after you have changed the time setting.

- If a different user logs on, using the fast switch or switch user features, the Timer Recording feature is not available to another user account. The Timer Recording Manager icon appears in the taskbar of the first user to log on.

Accessing the Giga Pocket Help

For more information about Giga Pocket Personal Video Recorder, follow these steps:

1. Click **Start** in the Windows® taskbar and select **All Programs**.
2. Select **Giga Pocket, Help**, and click **Giga Pocket Help**.

Giga Pocket Explorer

The Giga Pocket Explorer application serves as a file manager for your Video Capsules. Video Capsules and saved Playlists are managed in Cabinets.

Giga Pocket Explorer enables you to play back Video Capsules using Giga Pocket. You can import MPEG files, that were created with compatible Sony applications, and export Video Capsules as AVI or MPEG files.

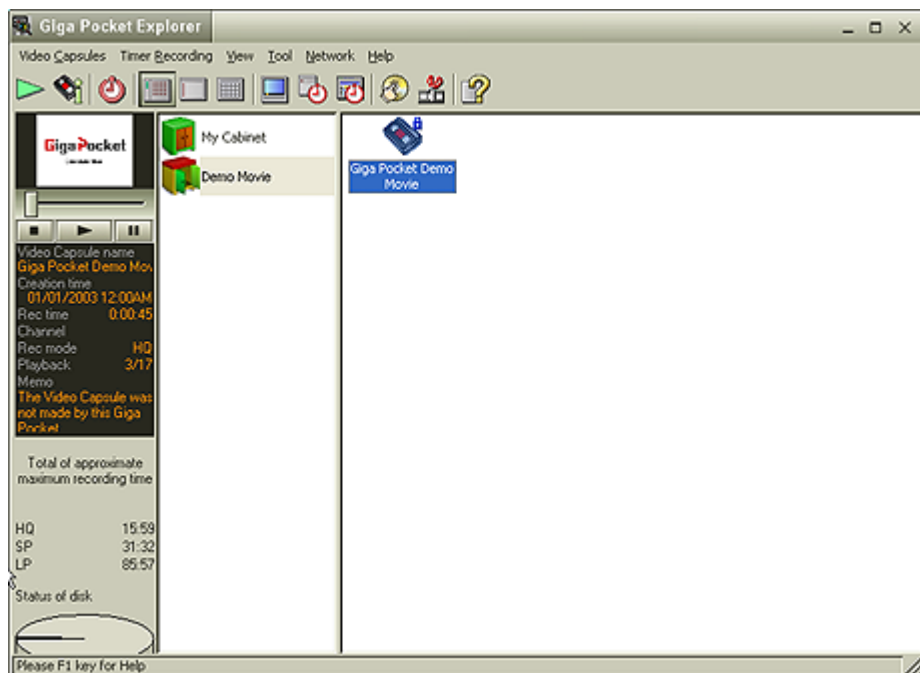
Using Giga Pocket Explorer

1. Click **Start** in the Windows taskbar, point to **All Programs**, point to **Giga Pocket**, point to **Giga Pocket Explorer**.

The Giga Pocket Explorer main window appears.






2. Click on the desired Cabinet to see a list of saved Video Capsules and Playlists.

Giga Pocket Explorer main window



Using the Giga Pocket Explorer Toolbar functions

From the Giga Pocket Explorer toolbar, you can:

- Launch Giga Pocket  to play a selected Video Capsule or Playlist.
- Launch Timer Recording Wizard  to set up timer recordings.
- Launch Click to DVD software  to burn Video Capsules to DVD recordable media. See Click to DVD software Help for more details.
- Launch DVgate Plus software  to edit your Video Capsules.
- Launch Giga Pocket Help  to obtain further assistance.
- Change the display views for your video contents, and edit recording information.

Accessing the Click to DVD Help

For additional information about using Click to DVD software features, follow these steps to access the Click to DVD Help.

1. Click **Start** in the Windows taskbar, point to **All Programs**.
2. Point to **Click to DVD** and click **Click to DVD Help**.


Accessing the DVGate Plus Help

For additional information about using Click to DVD software features, follow these steps to access the DVGate Plus Help.

1. Click **Start** in the Windows taskbar, point to **All Programs**.
2. Point to **DVGate Plus** and click **DVGate Plus Help**.

Recording Video Capsules onto recordable DVD media

You can record Video Capsules to DVD-R/DVD+R/DVD-RW/DVD+RW media with the Make DVD feature.

 The Click to DVD software or another preinstalled DVD-writing program must be installed in order to burn Video Capsules to recordable DVD media.

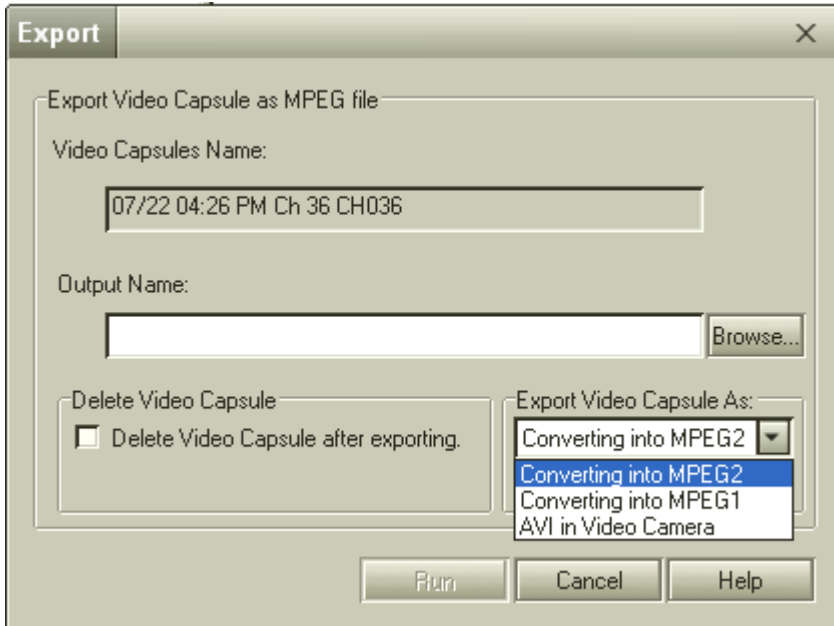
1. From the Giga Pocket Explorer main window, select the Video Capsules you want to burn onto a DVD.
2. On the Giga Pocket Explorer Toolbar, click **Launch DVD Writing Software**.
3. The Click to DVD software launches. Follow the on-screen instructions.

Exporting Video Capsules

You can export your Video Capsules as MPEG-1, MPEG-2, or AVI file formats for viewing on external media.

1. In the list area, right-click the Video Capsule you want to export. A shortcut menu appears.
2. Select **Export**. The Export dialog box appears.


Export dialog box



3. Enter an output name for the file you want to export and specify the location for the exported file.

You can select the option, Delete Video Capsule after export. If you do not want to delete the Video Capsule after export, leave the option disabled.

4. In the section, "Export Video Capsule As:", select to convert to an AVI, MPEG-1, or MPEG-2 format.
5. Click **Run** to begin exporting.

 Some conversion formats may not be available, depending on the recording mode that was used to create the Video Capsule.

Additional information about using Giga Pocket Explorer

- Video Capsules that are recorded using High Quality (HQ) or Standard Play (SP) mode can be converted and exported as MPEG-1, MPEG-2, and AVI files.

MPEG-2 files need a specific system environment for playback:

- A VAIO computer that has Giga Pocket Personal Video Recorder installed.
- A VAIO computer that has DVD playback capabilities.

If you wish to play your Video Capsule in a different system environment, you can convert and export your Video Capsule using MPEG-1 format.

- Video Capsules that are recorded using Long Play (LP) mode can be converted and exported as MPEG-1 files.
- You can convert an imported MPEG file into a Video Capsule, only if the file was created using DVgate Plus or other VAIO AV applications.

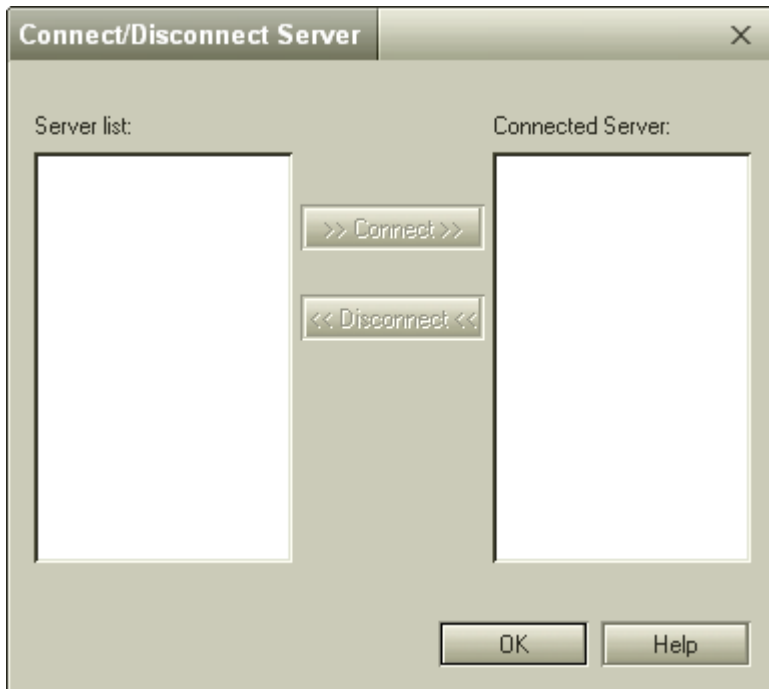
Using Network Cabinets

Giga Pocket Explorer enables you to connect to Video Capsules in network cabinets located on other computers in the network. These network cabinets can be accessed through the Giga Pocket Explorer main window when you are connected to the network.

Connecting to Network Cabinets

1. On the Giga Pocket Explorer menu, select **Network** and then **Connect/Disconnect**. The Connect/Disconnect Server dialog box appears.

Connect/Disconnect Server dialog box



2. Select the server you want to connect to from the Server list on the left side.
3. Click **Connect** to add the selected server to the Connected Server list, then click OK. The server is connected.
4. To disconnect, repeat step 1, then select the server you want to disconnect from the Connected Server list on the right.
5. Click **Disconnect**, then click **OK**. The server is disconnected.


Accessing the Giga Pocket Help

For more information about Giga Pocket Personal Video Recorder, follow these steps:

1. Click **Start** in the Windows® taskbar and select **All Programs**.
2. Select **Giga Pocket, Help**, and click **Giga Pocket Help**.

CLIE Converter

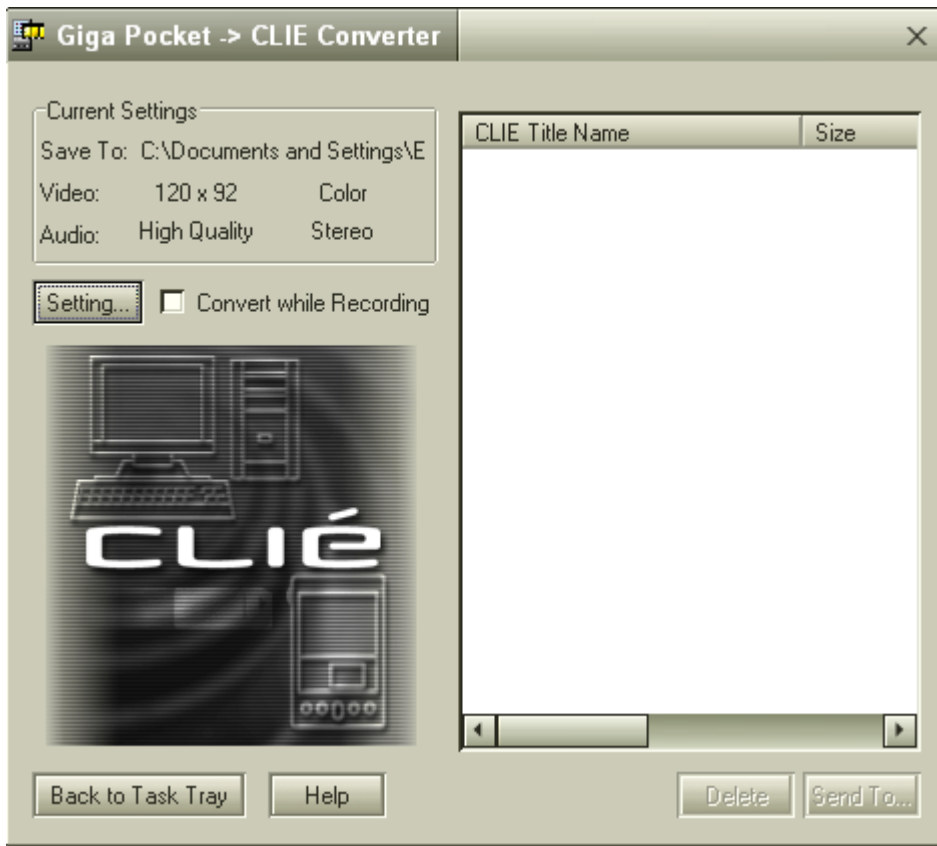
The CLIE Converter is a plug-in application that enables the conversion of Video Capsules into gMovie format. You are able to convert your Giga Pocket contents and HotSync® onto a Memory Stick® media for viewing with your Sony CLIE Handheld. In order to use the CLIE Converter plug-in application, make sure you have install all required software for the CLIE handheld.

 The Sony CLIE Handheld personal entertainment organizers provide a rich and compelling handheld computing experience. Powered by the Palm operating system, the CLIE handheld is ready to deliver music and video with amazing clarity. For more information on this exciting device, go to the Sony Style Web site at <http://sonystyle.com/vaio/clie>.

Starting CLIÉ Converter

1. Click **Start** in the Windows taskbar and point to **All Programs**.
2. Point to **Giga Pocket**, point to **Plug-ins**, and then click **CLIÉ Converter**. The **Giga Pocket -> CLIÉ Converter** dialog box appears.

Giga Pocket -> CLIÉ Converter main



Converting Video Capsules

1. From the **Giga Pocket -> CLIÉ Converter** dialog box, click the **Setting...** button. The Settings dialog box appears. Enter your desired settings and click **OK**.
2. Start Giga Pocket Explorer as follows:
 1. Click **Start** in the Windows taskbar, and then select **All Programs**.
 2. Select **Giga Pocket**, and then click **Giga Pocket Explorer**.
 3. Resize the Giga Pocket Explorer window so that the Giga Pocket -> CLIÉ Converter dialog box is visible.
 4. Click on the **Cabinet** icon to display the contents in the list area.
 5. Drag the Video Capsule from the Giga Pocket Explorer window and drop it in the list area of the Giga Pocket -> CLIÉ Converter main dialog box. The Video Capsule automatically converts into a video file.

During conversion, the Convert to CLIÉ dialog box appears, displaying the conversion status. When conversion is complete, the dialog box automatically closes.



The conversion process may take time, depending on the settings selected.

To convert multiple Video Capsules, hold down the Ctrl key while selecting Video Capsules in Giga Pocket Explorer. Drag and drop all selected capsules to the Giga Pocket -> CLIÉ Converter main window.

Transferring converted video files to a Memory Stick media

1. Insert a Memory Stick® media into the Memory Stick media slot on your computer.
2. From the **Giga Pocket -> CLIÉ Converter** main window, click to select the videos you want to transfer to the Memory Stick media.
3. Click **Send To**. The Send To dialog box appears.
4. Select **Using Memory Stick** as the transfer destination. Click **OK**.


During transfer, the Forwarding dialog box appears, displaying the transfer status. When transfer is complete, the Clie Converter window appears. Click **OK**.

Your converted video files can be played back on CLIÉ Handhelds that support the use of a Memory Stick media.

Transferring converted video files using the HotSync® operation

You can transfer your converted video files directly to your CLIÉ Handheld, when you launch a HotSync operation.

1. From the **Giga Pocket -> CLIÉ Converter** main window, click to select the videos you want to transfer using the HotSync operation.
2. Click **Send To**. The Send To dialog box appears.
3. Select **Using HotSync** as the transfer destination. Designate a user name, if applicable to your handheld's configuration. Click **OK**.
4. The "Send to HotSync" message box appears. Follow the on-screen instructions and click **OK**.

 For more information about the HotSync operation, see the information supplied with your CLIÉ Handheld.

Accessing the CLIÉ Converter Help


For more information about using the CLIÉ Converter plug-in application, follow these steps:

1. Click **Start** in the Windows taskbar and point to **All Programs**.
2. Point to **Giga Pocket**, point to **Help**, and then click **CLIÉ Converter Help**.

Internet Electronic Program Guide Service

Internet Electronic Program Guide is a free, online service that enables quick and easy access to your local TV listings. You can use the Internet Electronic Program Guide service with your Giga Pocket Personal Video Recorder for a "one-click" set up of timer recordings and record your favorite TV programs¹.

Giga Pocket Personal Video Recorder must be set up and configured correctly before you can use the Internet Electronic Program Guide service.


 You must read and accept the User Agreement before accessing the Internet Electronic Program Guide Web site (first time only).

The Internet Electronic Program Guide service is available only to users in the United States.

¹ Unauthorized duplication of audio or video files is a violation of applicable laws.

To set up your Internet Electronic Program Guide service

You must be connected to the Internet, before setting up your Internet Electronic Program Guide service.

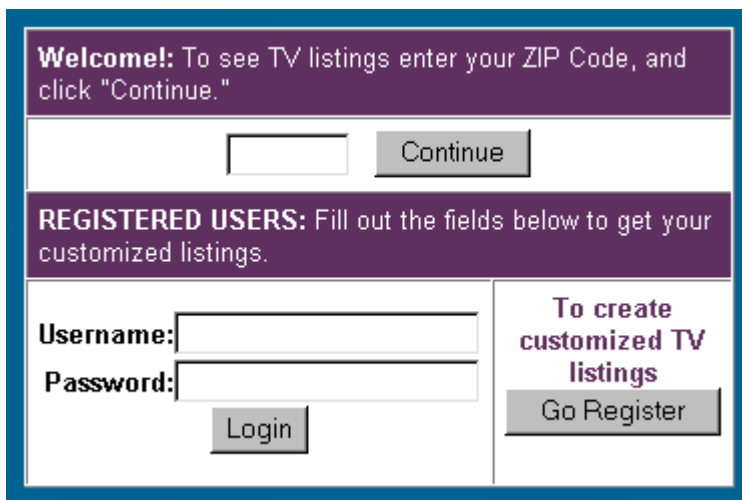
 Sony recommends using Microsoft® Internet Explorer as your Web browser to access the Internet Electronic Program Guide service.

To set up Internet Electronic Program Guide service, follow these steps:

1. Click **Start** in the Windows® taskbar and point to **All Programs**.
2. Point to **Giga Pocket**, then click **TV Program Web site**. Microsoft® Internet Explorer launches, and you are directed to the Internet Electronic Program Guide Web site.
3. The **Terms of Use** window appears. Click **I accept**, to continue.

The Welcome and Registration window appears.

Internet Electronic Program Guide Welcome and Registration window




4. In the **Welcome!** section, enter your 5-digit zip code and click **Continue**. The **Choose Your Provider** window appears, listing all TV providers or TV services available in your area.
5. Select your TV provider and then click **Confirm Channel Lineup**. The **Confirm Lineup** window appears, listing available channels by number and name.
6. Click **Yes** if the channel lineup is correct. Otherwise, click **No** and repeat steps 3 and 4 until you locate the correct channel lineup.
7. Your TV listings appear in table format, organized by time and channel. Click **Download All Channel Settings** to set your channels. The **Channel Information Converter** window appears, if this is the first time you have used this download feature. Click **OK**.

 Close all Giga Pocket applications before downloading your TV listings.

If you are using set-top box (STB) mode, you do not need to click Download All Channel Settings.

8. Verify the channel settings and click **OK**.
9. Your personal channel settings appear whenever you access the Internet Electronic Program Guide Web site.

 If your TV provider adds new channels or changes existing channels, an Update icon appears next to Download All Channel Settings. Click **Update** to add the new or updated channels to your personal channel setting.

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About Giga Pocket Personal Video Recorder

This section describes how to troubleshoot common problems you may encounter when using Giga Pocket Personal Video Recorder functions. Many problems have simple solutions, so try these suggestions before you contact Sony Customer Support.

Why can't I see an image or an image that is displayed properly when I am using a VCR?

Some images from an externally-connected video player device or a video game console, may not display or are not displayed correctly. These images include:

- Images from a playback screen that is in pause mode.
- Menu screens of the connected video player device.
- The end of the film roll being played back using the scroll bar.
- Video output from a video game console.
- Video output from a VCR, using a coaxial cable.

Giga Pocket cannot record or display all video images from this source.

Why does my Giga Pocket viewing window or the images played back from a Video Capsule, appear distorted or corrupted?

There are some situations where screen or image distortion may occur, such as:

- When you change the channel on the video player device.
- If there is a damaged section on your video tape.

When using Giga Pocket Personal Video Recorder, set your display settings as follows:

- **Colors** — Use the default factory settings (32-bit).
- **Screen area** — Use the default factory settings.

If you use other settings, you may experience poor image quality on your display.

Why does my system seem to slow down when I play a Video Capsule?

Your computer may respond slower if you try to play back a Video Capsule while recording a TV program with Giga Pocket. During a timer recording, Giga Pocket may interrupt or stop your Video Capsule playback to prioritize your computer's resources for the timer recording. If this occurs, wait until the timer recording session has completed, and then play back the Video Capsule.

Why did I get the error message, "Event buffer of audio overflow?"

The timer recording may fail in certain situations, such as:

- The coaxial cable (input) is disconnected after recording has started.
- The TV channel has lost broadcast signal during the recording session.
- Video content being recorded has poor signal quality.

Why did my on-screen display shift or split?

Your on-screen display may shift or split in rare instances. If this should occur, switch the TV/Recording deck and the playback deck, or try switching the channel. Your timer recording continues even if the on-screen display has shifted or split.

Why did Giga Pocket stop allowing me to create new Video Capsules?

You cannot create a new Video Capsule when the remaining free space on your hard disk drive reaches approximately 100 MB. Delete any unnecessary Video Capsules or files to increase the free space on your hard drive.

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Giga Pocket including PicoPlayer

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Internet Connections

This section describes the basic steps for setting up your dial-up or Ethernet connection to the Internet. The New Connection Wizard guides you through the process of connecting to the Internet and choosing an Internet service provider (ISP) or setting up an existing account. When you connect to the Internet, you can register your VAIO® computer, use online services, and gain access to Sony Computing Support.

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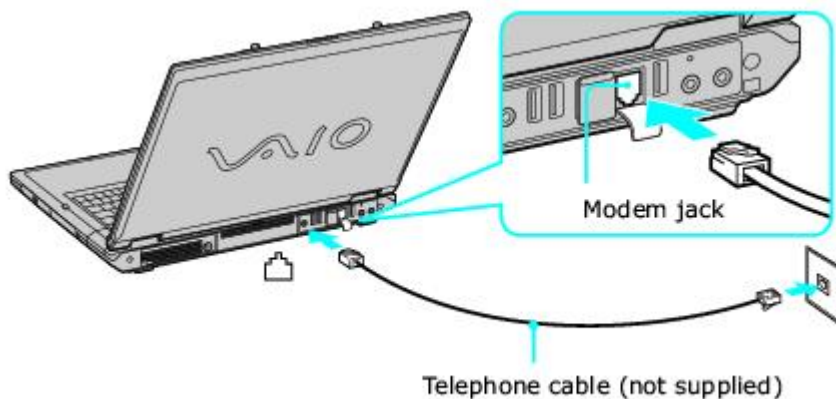
Setting up a dial-up Internet connection


Before you can connect to the Internet, you need to connect your computer to a telephone line via a telephone cable (not supplied). Once you set up your telephone cable, you're ready to connect to the Internet.

To connect a telephone cable

1. Locate the Modem jack on your computer. For location information, see "Locating Ports and Controls" in the "Setting Up" chapter of your printed VAIO® Computer Quick Start.
2. Plug one end of the telephone cable into the Modem jack. Make sure it clicks into place.
3. Plug the other end into the wall jack.

Connecting a Telephone Cable



 Your computer does not work with party lines, cannot be connected to a coin-operated telephone, and may not work with multiple telephone 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 telephone cable coming through a splitter, the modem or connected device may not work properly.

To set up a dial-up connection to the Internet

1. Connect your computer to a telephone line. See [To connect a telephone cable](#) for more information.
2. Click **Start**, point to **All Programs, Accessories, Communications**, and click **New Connection Wizard**. The **New Connection Wizard** appears.

New Connection Wizard



3. Click **Next**. If the **Location Information** dialog box appears, follow the on-screen instructions.
4. If it is not already selected, click to select **Connect to the Internet**, and click **Next**.

5. Follow the on-screen instructions.

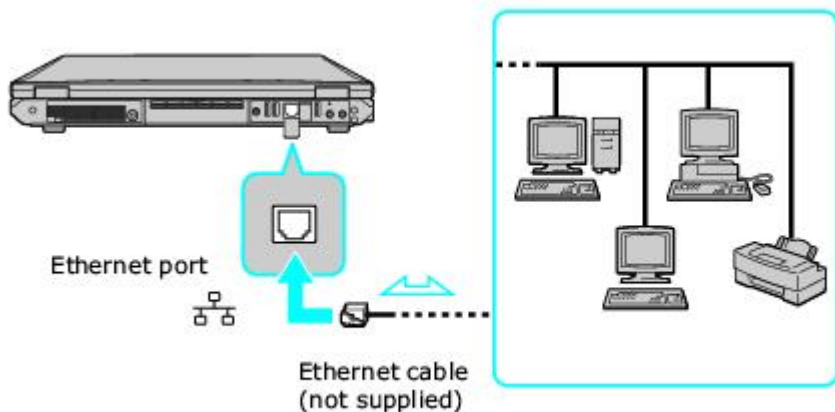
Setting up an Ethernet Internet connection


Your computer accommodates both 10BASE-T and 100BASE-TX Ethernet connections, with data transfer speeds of between 10 and 100 Mbps.

To connect an Ethernet cable

1. Locate the Ethernet port on your computer. For location information, see "Locating Controls and Ports" in the "Setting Up" chapter of your printed VAIO® Computer Quick Start.

Connecting an Ethernet Cable



2. Plug one end of the Ethernet cable into your computer's Ethernet port  and the other into the network connection.

To set up an Ethernet connection to the Internet

1. Connect your computer to a network connection.
2. Click **Start**, point to **All Programs, Accessories, Communications**, and click **New Connection Wizard**. The **New Connection Wizard** appears.

New Connection Wizard



3. Click **Next**. If the **Location Information** dialog box appears, follow the on-screen instructions.
4. If it is not already selected, click to select **Connect to the Internet**, and click **Next**.
5. Follow the on-screen instructions.

Customizing your Internet connection

The Internet Properties dialog box enables you to change the way you view the Internet. You can change your home page, fonts, language, and colors. You can also regulate content and set browsing preferences.

To open the Internet Properties dialog box

1. Click **Start** on the Windows® taskbar, and then **Control Panel**.
2. Click **Network and Internet Connections**, and then **Internet Options**. The **Internet Properties** dialog box appears.
3. Click the tabs to view options.
4. Make changes, and click **Apply** to activate your changes.
5. Click **OK**.

Network Connections

With a Sony computer, you can easily set up or connect to a variety of networks. The New Connection Wizard and Network Setup Wizard make it easy to gain access to networks (LANs) using wireless, Ethernet, or dial-up connections.

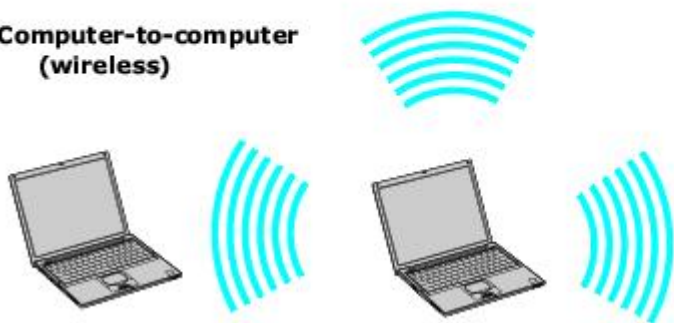
For more information about networking, click **Start, Help and Support**, and then **Networking and the Web**.

Types of Networks

Access point (wireless)



Computer-to-computer (wireless)



Ethernet (cables)



* The computers represented in this graphic may not be identical to the model you purchased.

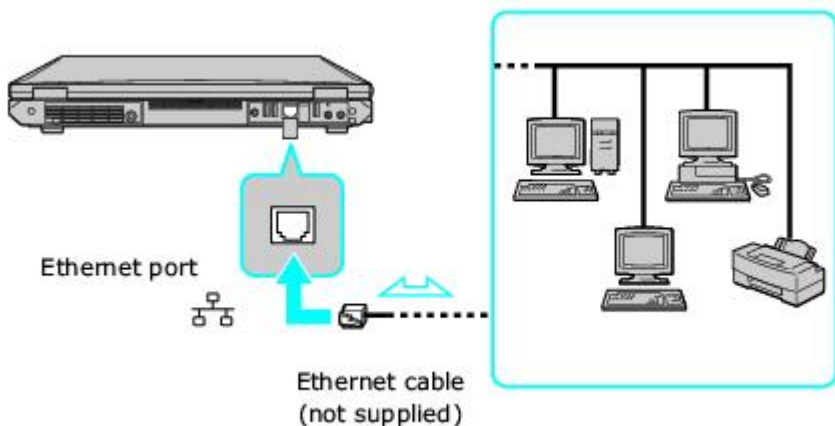
Using Ethernet and dial-up connections

For setting up local area networks (LANs), Ethernet is a widely installed technology. Your computer accommodates both 10BASE-T and 100BASE-TX Ethernet connections, with data transfer speeds of between 10 and 100 Mbps.

To connect to a local area network using a telephone or Ethernet cable

1. Connect an Ethernet or telephone cable to your computer. See [To connect an Ethernet cable](#) and [Setting up a dial-up Internet connection](#) for more information.

Connecting an Ethernet Cable




2. Click **Start**, point to **All Programs, Accessories, Communications**, and click **Network Setup Wizard**. The **Network Setup Wizard** appears.

Network Setup Wizard



3. Click **Next**. If you are prompted to the **Local Information** dialog box, follow the on-screen instructions.

⚠ Only connect 10BASE-T and 100BASE-TX cables to the Ethernet port . Do not connect any other type of network cable or any telephone 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, see [Using Ethernet and dial-up connections](#) or contact your network administrator.

You can connect to an Ethernet network from a remote location and use data, programs, and network resources. See Microsoft® Windows® Help by clicking **Help and Support** from the **Start** menu, and then clicking **Networking and the Web** in the left panel.


1. Connect an Ethernet or telephone cable to your computer. See [To connect an Ethernet cable](#) and [Setting up a dial-up Internet connection](#) for more information.
2. From the **Start** menu, point to **All Programs, Accessories, Communications**, and click **New Connection Wizard**.
3. Click **Next**. If you are prompted to the **Local Information** dialog box, follow the on-screen instructions.
4. Click **Connect to the network at my workplace**, and then click **Next**.
5. Follow the on-screen instructions.
6. Ask your network administrator for the detailed settings and devices needed to connect to an existing network.

Using wireless network connections (selected models only)

A wireless local area network (LAN) is a network in which you can connect to a LAN through a wireless (radio) connection. You can opt to purchase a Sony Wireless LAN Access Point to set up a LAN.

The wireless LAN access point is designed for building a wireless LAN environment. Because a wireless LAN configuration requires no wiring, you can operate multiple computers more freely than ever before.

Your computer is equipped with a built-in mini PCI card that allows for wireless connections. For information about your computer's wireless capabilities, see the [Welcome](#) page to view your VAIO® Computer Specifications.

 For more information on Sony Wireless LAN, go to <http://www.sonymstyle.com/vaio>.

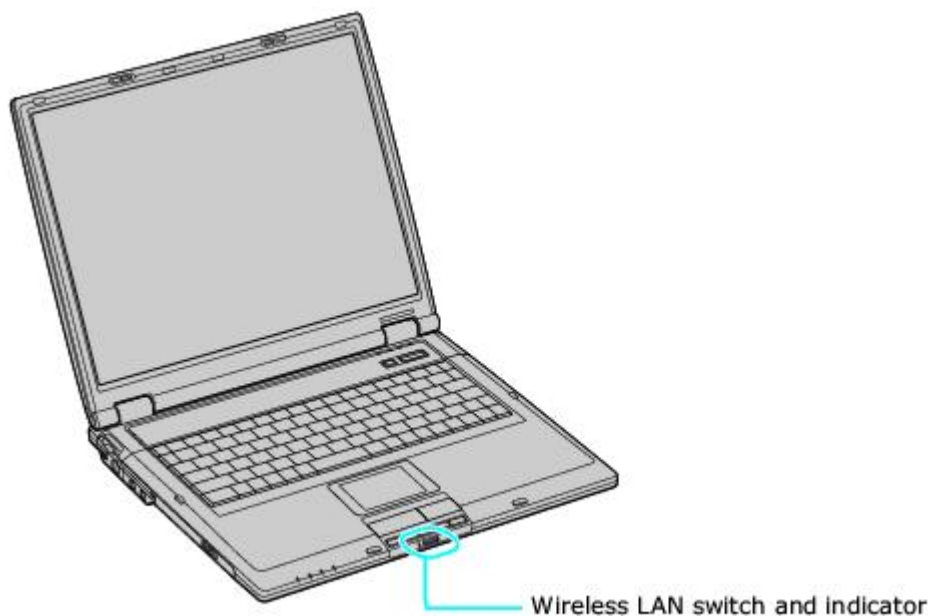
There are two types of wireless connections:

- 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.
- A computer-to-computer (ad-hoc) 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 an ad-hoc network easily at home.

To connect to a wireless network

1. Make sure an access point is set up. See the instructions that accompanied the access point for more information.
2. Move the Wireless LAN switch to **ON**.

Turning on the Wireless Network Switch



3. Click **Start, Control Panel, Network and Internet Connections**, and then click **Network Connections**. The **Network Connections** window appears.
4. In the right panel under **LAN or High-Speed Internet**, click **Wireless Network Connection**. The Wireless Network Connection window appears.

Wireless Network Connection

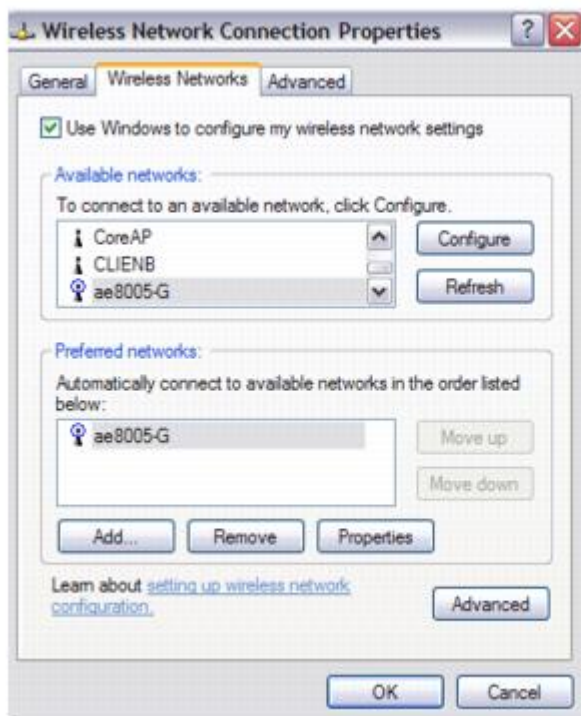


5. From the **Available wireless networks** list, select the name of the network in which you want to connect. If you do not see the network name, see [If the network does not appear in the Available wireless networks list box](#).
6. If required, type the network key in the **Network key** box. (If necessary, ask the administrator for the key.)
7. Retype the network key in the **Confirm network key** box.
8. Click **Connect**.

If the network does not appear in the Available wireless networks list box

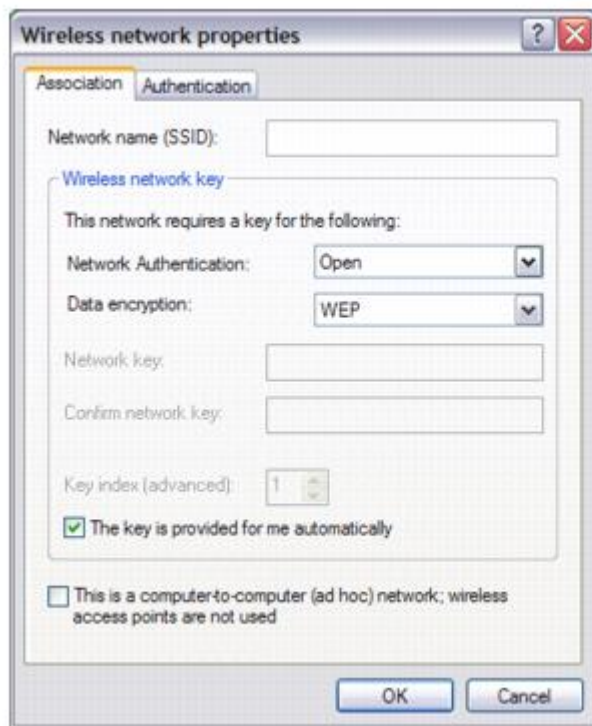
1. Click **Advanced** on the **Wireless Network Connection** dialog box. The **Wireless Network Connection Properties** dialog box appears.

Wireless Network Connection Properties




2. Click **Add** in the **Preferred networks** box. The **Wireless network properties** dialog box appears.

Wireless Network Properties



3. Type the name of the network (access point) you want to connect to in the **Network name (SSID)** box.

 The following steps are for networks that require a network key. If you do not know the network key or are not sure a network key is required, see the network administrator or the guide that accompanied your access point for more information.

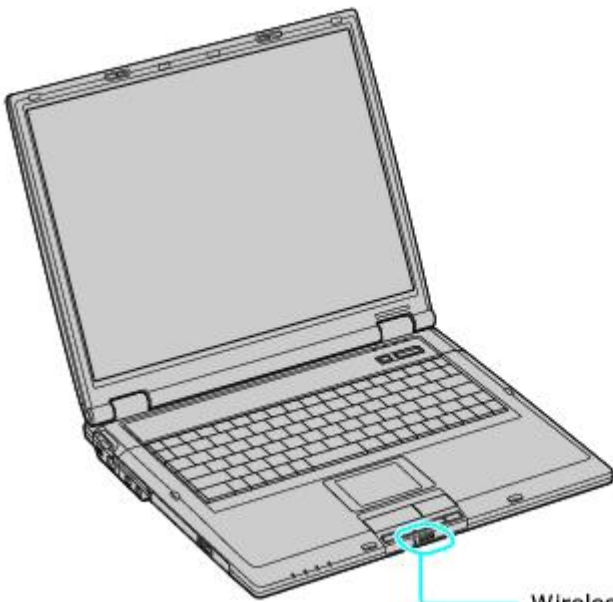
4. If available, make sure the **Data encryption (WEP enabled)** check box is selected. If the Data encryption (WEP enabled) check box is not available:
 1. Select an authentication method from the Network Authentication menu.
 2. Select a data encryption method from the Data Encryption menu.
5. Click to cancel the **The key is provided for me automatically** check box.
6. Type the network key in the **Network key** box if it is required by the selected authentication method.
7. Retype the network key in the **Confirm network key** box.
8. Click **OK**. The network name appears in the **Preferred networks** list box.

To set up a computer-to-computer (ad-hoc) network

The computer-to-computer (ad-hoc) network is only supported by the IEEE 802.11b wireless standard.

1. Move the Wireless LAN switch to **ON**.

Turning on the Wireless Network Switch



Wireless LAN switch and indicator

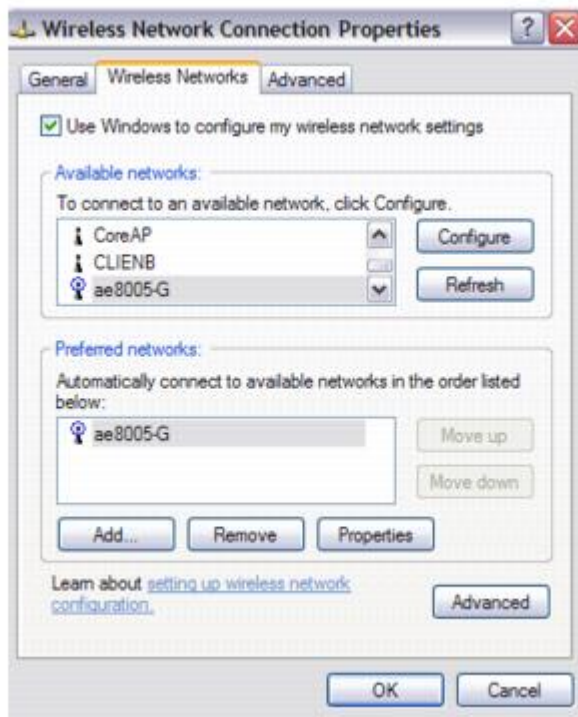
2. Click **Start, Control Panel, Network and Internet Connections**, and then click **Network Connections**. The **Network Connections** window appears.
3. In the right panel under **LAN or High-Speed Internet**, click **Wireless Network Connection**. The Wireless Network Connection window appears.

Wireless Network Connection



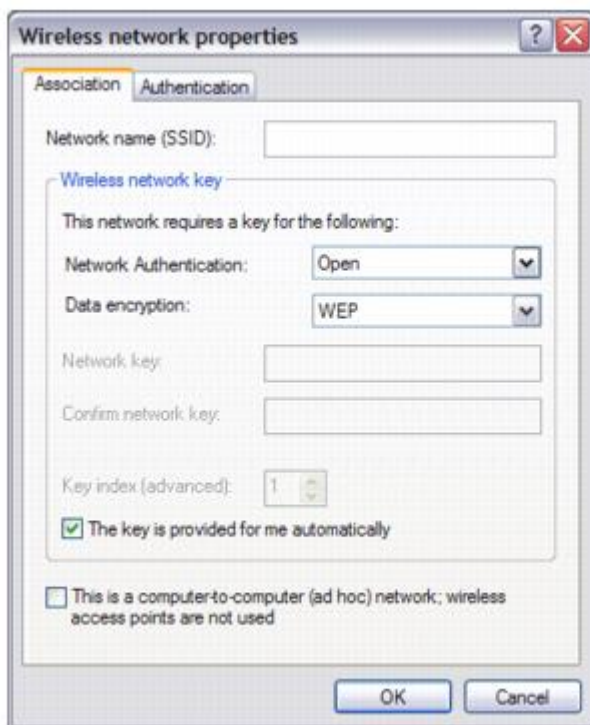
4. Click **Advanced**. The **Wireless Network Connection Properties** dialog box appears.

Wireless Network Connection Properties



- Click **Add**. The **Wireless network properties** dialog box appears.

Wireless Network Properties



- Type the name of the network you want to connect to in the **Network name (SSID)** box.
- If available, make sure the **Data encryption (WEP enabled)** check box is selected. If the Data encryption (WEP enabled) check box is not available:
 - Select an authentication method from the Network Authentication menu.
 - Select a data encryption method from the Data Encryption menu.
- Click to cancel the **The key is provided for me automatically** check box.
- Type a network key in the **Network key** box.
- Retype the network key in the **Confirm network key** box.
- Click to select **This is a computer-to-computer (ad hoc) network; wireless access points are not used**.
- Click **OK**. The network name appears in the **Preferred networks** list box.

13. Click **Advanced**. The **Advanced** dialog box appears.

Advanced



14. Click to select **Computer-to-computer {ad hoc} networks only**, and then click **Close**.

To disconnect from a wireless network

- For computers with built-in wireless LAN functionality, move the Wireless LAN switch to OFF.



Turning off the wireless LAN functionality while accessing remote documents, files, or resources may result in data loss.

To disconnect from a computer-to-computer (ad-hoc) network

1. Click **Start, Control Panel, Network and Internet Connections**, and then click **Network Connections**. The **Network Connections** window appears.
2. In the right panel under **LAN or High-Speed Internet**, click **Wireless Network Connection Enabled**. The Wireless Network Connection Status window appears.
3. Click **Properties**. The **Wireless Network Connection Properties** dialog box appears.
4. On the **Wireless Networks** tab, click **Advanced**. The **Advanced** dialog box appears.
5. Click to select **Any available network (access point preferred)**, and click **Close**.
6. Move the Wireless LAN switch to **OFF**.

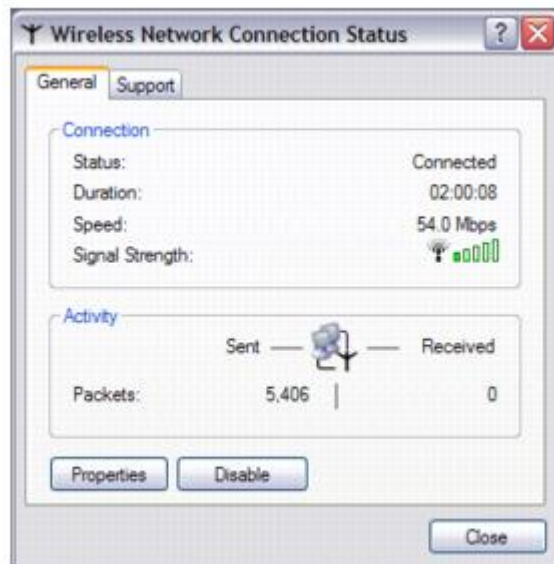
Checking your network connection status

Whether you have a wireless, Ethernet, or dial-up connection, you can check the status of that connection.


To check your network connection status

1. Click **Start** on the taskbar, and click **Control Panel, Network and Internet Connections,** and **Network Connections.** The **Network Connections** window appears.
2. Under **LAN or High-Speed Internet,** click the enabled network connection to open the connection status window.

Wireless Network Connection Status



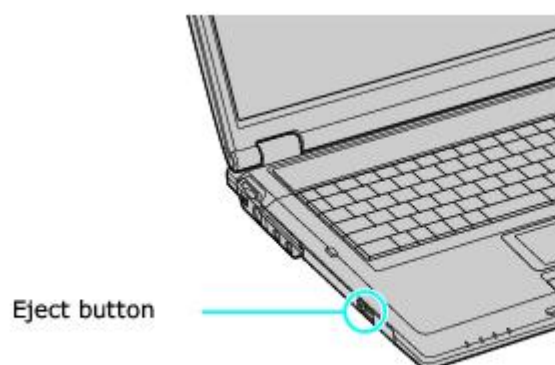
Inserting and Ejecting CDs or DVDs

 Avoid using adhesive labels to identify your CDs or DVDs. Adhesive labels may damage the optical drive if they come off while the disc is in the drive.


To insert a disc

1. Turn on the computer or exit a power saving mode (Standby or Hibernate) if one is active. For more information, see [Using power saving modes](#).
2. Press the Eject button on the optical drive cover to open the drive tray. The drive tray slides out.

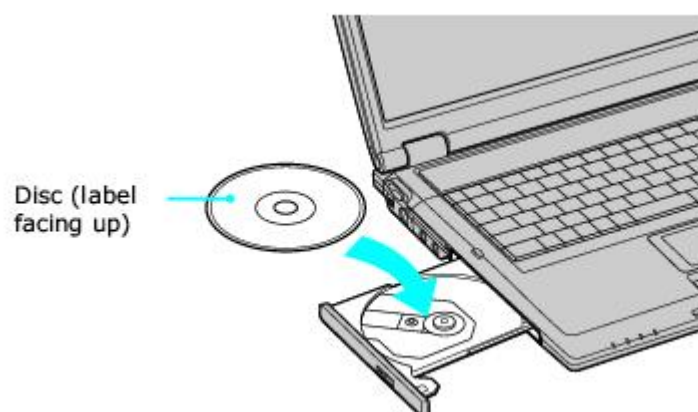
Opening the Drive Tray




3. Place a disc on the drive tray with the label facing up.

 You can play some DVDs on both sides. Insert this type of DVD with the side you want to play facing up.

Inserting a Disc



4. Press the disc onto the tray until the disc clicks securely into place.

 **If you do not seat the disc firmly over the hub, the disc may come loose while it is in the drive. A loose disc may damage the optical drive and make opening the drive tray difficult.**


5. Push the drive tray gently to close it. The Busy indicator on the drive cover blinks while your computer is reading data from the drive.

To eject a disc

1. Turn on the computer or exit a power saving mode (Standby or Hibernate) if one is active. For more information,


see [Using power saving modes](#).

2. Close all programs that access the optical drive, and wait for the Busy indicator on the drive cover to turn off.
3. Press the Eject button on the drive cover to open the drive tray. The drive tray slides out.

 If the Eject button does not work, turn off the computer and insert a thin, straight object (such as a paper clip) into the manual eject hole next to the Eject button.

4. Lift the disc from the drive.
5. Push the drive tray gently to close it.

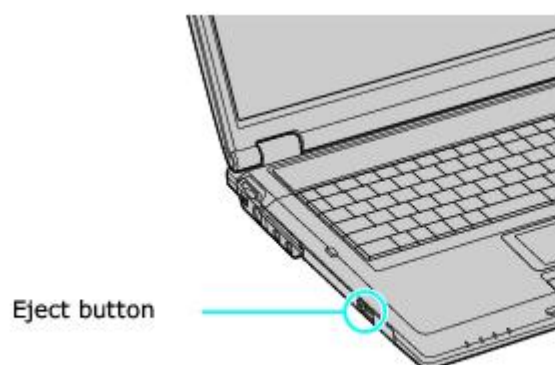
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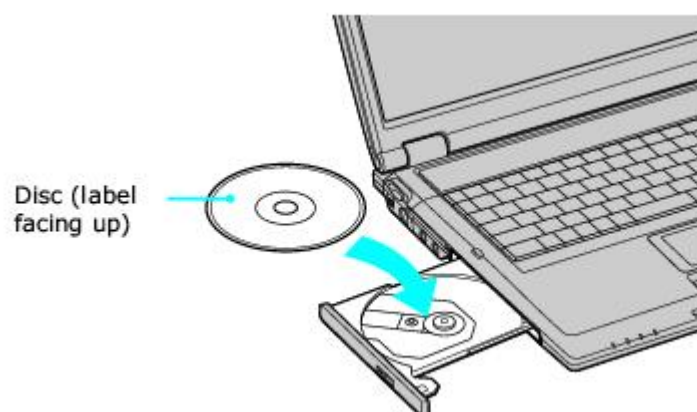
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4. Lift the disc from the drive.
5. Push the drive tray gently to close it.

Copying and Playing CDs and DVDs

Your computer plays and records CDs and DVDs, depending on the model you purchased. Check your specifications for the type of optical drive installed on your computer and use the table below to see which types of media your optical drive supports.

Optical Drive Media (disc) Support

CD-ROM Plays CD, CD-R, and CD-RW

CD-RW Plays CD, CD-R, and CD-RW

Records to CD-R and CD-RW

CD-RW/DVD-ROM Plays CD, CD-R, and CD-RW

Records to CD-R and CD-RW

Plays DVD and most DVD-R and DVD-RW

DVD-RW Plays CD, CD-R, and CD-RW

Records to CD-R and CD-RW

Plays DVD, DVD-R, and DVD-RW

Records to DVD-R and DVD-RW


DVD±RW Plays CD, CD-R, and CD-RW

Records to CD-R and CD-RW

Plays DVD, DVD-R, DVD-RW, DVD+R and DVD+RW

Records to DVD-R, DVD-RW, DVD+R, and DVD+RW

 **Do not remove the optical drive when the computer is in a power saving mode (Standby or Hibernate). Doing so may cause the computer to malfunction.**

 If you plan to use an external optical drive, connect the drive before you launch any preinstalled CD/DVD program.

Playing CDs

Before you play an audio CD, you may need to enable your computer's audio feature.

To enable the audio feature






1. Click **Start** on the Windows® taskbar, and then click **Control Panel, Performance and Maintenance**, and **System**. The **System Properties** dialog box appears.

 As a shortcut, you can press **Fn + Windows key**  + **Insert** to open the **System Properties** dialog box.

2. Select the **Hardware** tab, and in the **Device Manager** box, click **Device Manager**. A window with a listing of the computer's hardware devices appears.
3. Double-click the optical drive device to open the submenu.
4. Double-click the listed drive, and select the **Properties** tab.
5. Click to select the **Enable digital CD audio for this CD-ROM device** check box if it is not already selected.
6. Click **OK**.

To adjust the volume for playing CDs and DVDs

Some programs have built-in volume controls, which you can adjust. If there are no volume controls, then adjust the volume of your computer's built-in speakers by doing one of the following:

- Using the Function keys. An on-screen display may appear, notifying you when a change occurs.
 - To increase volume, press the **Fn** and **F4** keys, and then press  or .
 - To decrease volume, press the **Fn** and **F4** keys, and then press  or .
- Using the Volume icon.
 - Double click the **Volume** icon  on the **Taskbar Notification** area. The **Volume Control** dialog box appears.
 - In the **Volume Control** and **Wave** columns, move the **Volume** sliders up to increase volume and down to decrease volume.

To play an audio CD

1. Insert the disc into the optical drive.
2. If nothing appears on the desktop once you insert an audio CD disc, then click **Start**, point to **All Programs**, and click to open a CD program, such as SonicStage.
If the **Audio CD** window appears, click to select an option.

Audio CD



Copying files to CDs

Before you copy files to a CD-RW or CD-R disc, read the following notes to avoid a computer malfunction and ensure the best results:


- Deactivate the screen saver and exit anti-virus software.
- Deactivate memory-resident disc utilities to avoid data loss.
- Disable the FindFast program if it is installed on your computer. Click **Start** and point to **All Programs** to see a list of programs on your computer.
- Connect and use the AC adapter to power your computer or make sure your battery is at least 50 percent charged. See [Powering Your Computer](#) for more information.

To copy files to a CD-RW or CD-R

1. Insert a blank CD-R or CD-RW disc into the optical drive.
If the **CD Drive** window appears, click **Take no action**.

CD Drive



2. Open Windows Explorer by pressing the **Windows** key  and the **E** key simultaneously.
3. In the **Folders** panel on the left, locate the file(s) or folder(s) you want to copy and either:
 - Right-click the file(s) or folder(s), point to **Send To**, and click the optical drive name.
 - Drag the file(s) or folder(s) onto the optical drive icon in the **Files Stored on This Computer** panel.
4. Close Windows Explorer.
5. Click **Start**, and **My Computer**.
6. Click the optical drive icon under **Devices with Removable Storage**. A new window appears with the file(s) or folder(s) you want to copy listed under **Files Ready to Be Written to the CD**.
7. In the **CD Writing Tasks** box, click **Write these files to CD**.
8. Follow the instructions on the **CD Writing Wizard**.

CD Writing Wizard



Do not strike or shake the computer while writing data to a disc.

¹ The read/write drive letter designation may vary, depending on your system's hardware configuration.

Playing DVDs

You can play DVDs in your computer's optical drive and view the video on a multimedia display or on a TV.

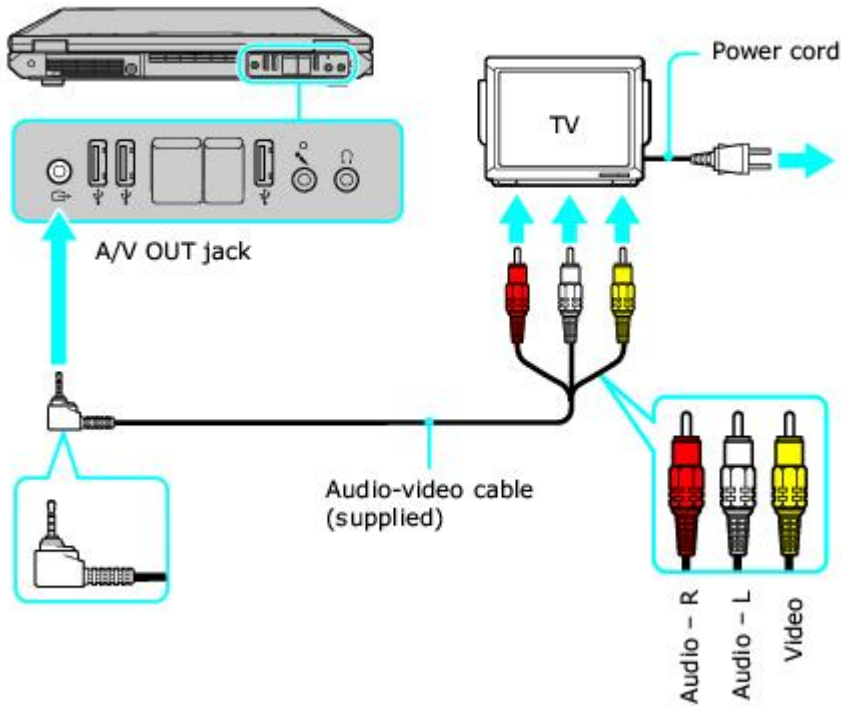
Connecting your computer to a TV

Your computer is equipped with an A/V OUT jack, which enables you to connect your computer to a TV. To locate the A/V OUT jack on your computer, see "Locating Controls and Ports" in the "Setting Up" chapter of your printed VAIO® Computer Quick Start.


To connect a TV to your computer

1. Make sure your computer is turned off, then locate the A/V OUT jack on the computer.
2. Plug one end of an audio-video (AV) cable (not supplied) into the A/V OUT jack.
3. Plug the other end of the AV cable into the audio and video ports on the TV.

Connecting a TV



4. Switch the TV input channel to external input.



 See the guide that accompanied your TV for information on how to switch to external input.

Playing DVDs on a TV

 **Do not remove the optical drive when the computer is in a power saving mode (Standby or Hibernate). Doing so may cause the computer to malfunction.**

 Connect the external optical drive if you plan to use one.

To play a DVD

1. Close all open programs.
2. Disable the screen saver and the virus checker.
3. If you are using battery power, set the power management profile to DVD. Follow these steps:
 1. Close all open programs.
 2. Right-click the **CPU** icon  or Profile icon , depending on the model you purchased, on the **Taskbar Notification** area.
 3. Select **Profiles** from the shortcut menu, and then select **DVD** from the submenu menu. You can also select **Automatic Profile Selection**, which sets the power management profile to **DVD** whenever a DVD is inserted into the optical drive. See [Conserving Battery Power](#) for more information.
4. Connect the TV to the computer. See [Connecting your computer to a TV](#) for more information.
5. Open a preinstalled DVD program, such as WinDVD, by following these steps:
 1. Click **Start** on the taskbar, and point to **All Programs**.
 2. Select a program, such as WinDVD, to play the DVD. For instructions on how to use a program, see the help guide included with the DVD program.
6. Select a display.
 1. Press the **Fn+F7** keys to view the image on either the computer screen (LCD) or the TV. See [Selecting a display](#) for more information.

 **The Fn+F7 keys will not work once a DVD is inserted into the optical drive. Switching the display while a DVD is playing may cause the computer to malfunction, and you may need to restart the DVD software.**

2. Insert the DVD into the optical drive.

 Systems equipped with a CD-RW/DVD-ROM drive can read most DVD-R media.

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

Do not switch power saving modes while the computer is playing a DVD.

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

Disconnecting your computer from a TV

Simply unplug the audio-video (AV) cable from the A/V OUT jack on the computer.



Playing DVDs on your computer

Your computer is equipped with an optical drive that enables you to watch DVDs and most DVD-R discs on your computer.

To play a DVD while using AC power

1. Close all open programs.
2. Insert the DVD into the optical drive.
3. Open a preinstalled DVD program, such as WinDVD®, by following these steps:
 1. Click **Start** on the taskbar, and point to **All Programs**.
 2. Select a program, such as WinDVD, to play the DVD. For instructions on how to use a program, see the help guide included with the DVD program

To play a DVD while using battery power

1. Set the power management profile to **DVD**.
 1. Close all open programs.
 2. Right-click the **CPU** icon  or Profile icon , depending on the model you purchased, on the **Taskbar Notification** area.
 3. Select **Profiles** from the shortcut menu, and then select **DVD** from the submenu. You can also select **Automatic Profile Selection**, which sets the power management profile to **DVD** whenever a DVD is inserted into the optical drive. See [Conserving Battery Power](#) for more information.
2. Insert the DVD into the optical drive.
3. Open a preinstalled DVD program, such as WinDVD, by following these steps:
 1. Click **Start** on the taskbar, and point to **All Programs**.
 2. Select a program, such as WinDVD, to play the DVD. For instructions on how to use a program, see the help guide included with the DVD program.



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

Do not switch power saving modes while the computer is playing a DVD.


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

Copying files to DVDs (on selected models only)

Use the table shown on [Copying and Playing CDs and DVDs](#) to see which type of DVD media your computer supports.

To copy files to a DVD-R or DVD-RW

1. Connect the AC adapter to the computer. See [Connecting the AC adapter](#) for more information.
2. Insert the disc into the optical drive. See [Inserting and Ejecting CDs or DVDs](#) for more information.
3. Click **Start, All Programs**, and select the DVD software program you want to use from the submenu.

 You can also reference the online help guides supplied with the program.

 **Do not strike or shake the computer while copying files to a disc.**

Using the Touch Pad

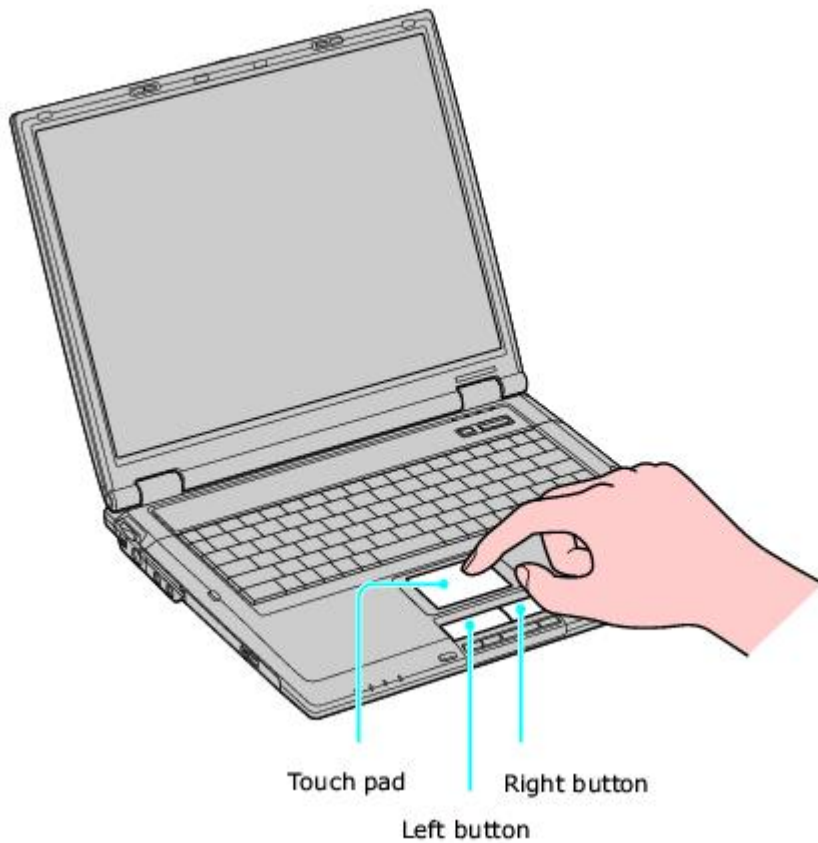
A pointing device called a touch pad is located in front of the keyboard. You can point to, select, drag, and scroll objects on the screen using the built-in touch pad.

Using the Touch Pad

A pointing device called a touch pad is located in front of the keyboard. You can point to, select, drag, and scroll objects on the screen using the built-in touch pad.

Describing the touch pad

Locating the Touch Pad



Touch Pad Action

Description

Sliding one finger

Equivalent to using a mouse to place the pointer on an item.

Tapping once

Equivalent to pressing the left button once.

Tapping twice

Equivalent to pressing the left button twice.

Sliding one finger while pressing the left button

Equivalent to using the mouse to drag an item.

Moving your finger along the right edge of the touch pad
(only with programs that support a touch pad scroll feature.)

Equivalent to scrolling vertically. (The scroll function is available

Moving your finger along the bottom to scroll horizontally
(available only with programs that support a touch pad scroll feature.)

Equivalent to scrolling horizontally. (The scroll function is




Customizing the touch pad

Sony Notebook Setup lets you customize, enable, or disable the touch pad. Open the Mouse Properties dialog box to set your touch pad and mouse preferences, such as changing pointers, enabling or disabling the tapping feature, clicking both buttons simultaneously, and adjusting the touch pad speed.

To customize the touch pad and mouse

- Right-click the **Touchpad** icon  on the **Taskbar Notification** area, and click **Mouse Properties** from the shortcut menu. The **Mouse Properties** dialog box appears.

To enable the touch pad

- Press the **Windows** key . The **Start** menu appears.
- Press **P** until **All Programs** is selected, and press **Enter**.
- Press **S** until **Sony Notebook Setup** is selected, and press **Enter**. A submenu appears with **Sony Notebook Setup** preselected.
- Press **Enter**. The **Sony Notebook Setup** dialog box appears.
- Press the **Right Arrow** key  to select the **Device** tab.
- Press the **Tab** key to select the **Default** button, and press **Enter**. A pop-up window appears.
- Press the **Left Arrow** key  to select **OK**, and press **Enter**. The **Enable Touchpad** option is automatically selected.
- Press the **Tab** key to select the **Apply** button, and press **Enter**.
- Click **OK**.

To disable the touch pad

- Click **Start** on the Windows® taskbar, and point to **All Programs**.
- Point to **Sony Notebook Setup**, and click **Sony Notebook Setup** in the submenu. The **Sony Notebook Setup** dialog box appears.
- Click the **Device** tab.
- In the left panel, click to cancel the **Pointing Device** check box.
- Click **Apply**. A Sony Notebook Setup message appears.
- Click **Yes**.

Using Memory Stick Media

Your VAIO® computer is equipped with a Memory Stick® slot that supports certain types of Memory Stick® media.


About Memory Stick media

Memory Stick® media are a compact, portable, and versatile data storage media designed for exchanging and sharing digital data with compatible devices. You can store different data formats on a single Memory Stick media. The following types of Memory Stick media are available, but compatibility with your computer can vary.

- MagicGate Memory Stick media (MG Memory Stick media) — Provides copyright protection with authentication and encryption, using Sony® MagicGate technology. Authentication ensures that protected content is only transferred between compliant devices and media. Protected content can be recorded and transferred in an encrypted format to prevent unauthorized duplication or playback.
- Memory Stick PRO media — Provides MagicGate copyright protection and high-speed transfer features when used with compatible Memory Stick PRO devices. VAIO® computers support Memory Stick PRO media for data storage purposes only. Currently, high-speed data transfer and the MagicGate technology features, such as authentication and encryption, are not available.
- Memory Stick media — Provides data storage only. The Memory Stick media does not provide MagicGate technology or high-speed data transfer.

Currently, Sony® SonicStage and OpenMG software are not compatible with the new Memory Stick PRO media. Sony suggests using only MG Memory Stick media to store and transfer any data created with SonicStage or OpenMG software.

Visit the Sony Computing Support Web site at <http://www.sony.com/pcsupport> regularly for the latest information on the new Memory Stick PRO media.


 Memory Stick media do not support video file playback directly from the media. Copy the video file to your hard disk drive and then play back the file.

Inserting Memory Stick media

Before using Memory Stick® media, back up important data. The media slot accommodates only one Memory Stick media at a time.

To insert Memory Stick media

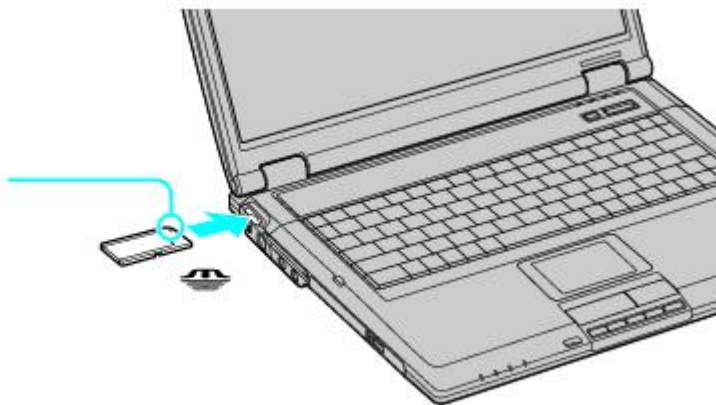
1. Insert the Memory Stick media with the arrow facing up and toward the Memory Stick media slot.

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

2. Carefully slide the Memory Stick media into the slot until it clicks in place. The Memory Stick media indicator briefly blinks.

Inserting Memory Stick Media

Insert Memory Stick media (not supplied) with the arrow facing the slot



Viewing the contents

Depending on the model you purchased, the Sony Memory Stick window may appear when you insert a Memory Stick® media. From this window, you can choose to view, print, copy or organize your Memory Stick images or data. If the Sony Memory Stick window does not appear when you insert your Memory Stick media, then follow these steps:

To view the contents

1. From the **Start** menu, click **My Computer**. The **My Computer** window appears.
2. Click **Sony MemoryStick**. The **Sony MemoryStick** window appears, displaying the contents stored on the Memory Stick media.

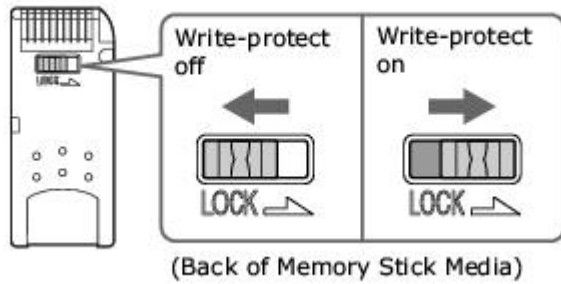
Write-protecting Memory Stick media

Memory Stick® media is designed with a write-protect tab to protect data from accidental erasure or overwriting. Move the tab to the right or left to set or release write-protection. When the write-protect tab of the Memory Stick media is set to LOCK, data cannot be recorded or erased.

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



Formatting 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. For more information about using Memory Stick Formatter, refer to Formatter Help.

 **Formatting Memory Stick media erases all data, including music data, previously saved to it. Before you reformat Memory Stick media, confirm that the media does not contain files you want to keep. Back up important data before formatting the media.**

To format Memory Stick media


1. Insert the Memory Stick media into the Memory Stick media slot. See [To insert Memory Stick media](#) for more information.
2. From the **Start** menu, click **My Computer**. The **My Computer** window appears.
3. Right-click **Sony MemoryStick**, and click **Format** from the menu. The **Format Sony MemoryStick** dialog box appears.
4. Select **Quick Format** in the **Format options** box, and then click **Start**.

Removing Memory Stick media

If the Memory Stick® media is removed prematurely, a blue screen with a message may appear 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.

To remove Memory Stick media

1. Wait a minimum of 10 seconds after the Memory Stick media finishes reading or writing data before removing the media.
2. Make sure the access light is off.
3. Push the Memory Stick media in toward the computer.
4. When the Memory Stick media ejects, pull it out.

 The Memory Stick media may eject completely from the slot.

Using PC Cards

Your computer includes one or more PC Card slots. A PC Card enables you to connect devices such as an optical drive, floppy disk drive, or Network Interface Card (NIC).

See your VAIIO® Computer Specifications for the type of PC Card that is compatible with your computer. These slots are compatible with CardBus. If your computer has more than one PC Card slot, use the lower slot for Type III PC Cards. You do not need to turn off your computer to insert or remove a PC Card.

Inserting PC Cards

Some PC Cards may require you to disable idle devices when using the PC Card. You can use Sony Notebook Setup to disable these devices.

To open Sony Notebook Setup

1. Click **Start** on the Windows taskbar, and then click **All Programs**.
2. Point to **Sony Notebook Setup**, and click **Sony Notebook Setup**. The **Sony Notebook Setup** dialog box appears.

To insert a PC Card

1. Make sure the front label of the PC Card is facing up.
2. Push the PC Card gently into the slot. The system automatically detects the PC Card.

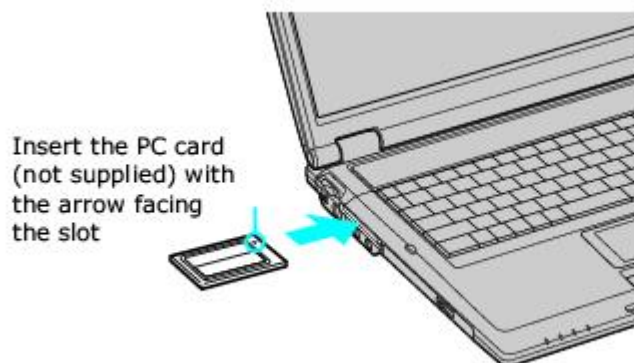


Do not force a PC Card into the slot; this may damage the connector pins.

When a PC Card is inserted, do not place your computer in a bag or case. Pressure or shock to a PC Card may damage your computer.

Touching the head of the PC Card will not damage the connector pins, but damage may occur if the head of the PC Card is sticking out of the PC Card slot while the computer is being transported.

Inserting a PC Card




Removing PC Cards

You can remove PC Cards while the computer is on or off. PC Cards draw power from the computer when they are inserted into the PC Card slot, whether or not you use the card.

If you are not using your PC Card and you are using a battery as a power source, remove the PC Card from the PC Card slot to conserve battery power.

To remove a PC Card while your computer is on


1. Double-click the **Safely Remove Hardware** icon  on the taskbar. The **Safely Remove Hardware** dialog box appears.
2. Click to select the PC Card in the **Hardware devices** window, if it is not already selected.
3. Click **Stop**. The **Stop a Hardware device** window appears.
4. Make sure the PC Card is selected, and click **OK**. A message appears stating it is safe to remove the hardware device.
5. Push the Release button. The Release button pops out.
6. Push the Release button a second time. The PC Card pops out.
7. Gently pull the card out of the slot.

To remove a PC Card while the computer is off

1. Push the Release button once. The Release button pops out.
2. Push the Release button a second time. The PC Card pops out.
3. Gently pull the card out of the slot.


Using the Multilingual User Interface Language Option

(Microsoft® Windows® XP Professional only) After you have initially setup your new VAIO® computer, you can change the language displayed in Microsoft® Windows® XP Professional operating system. The multilingual user interface (MUI) language option changes the text controlled by Windows XP Professional operating system. Menus, help files, and icons generated by Windows XP Professional are shown in your selected language. All other programs are displayed in English as the default language.

 The multilingual user interface language option is not designed to replace a localized version of the Microsoft® Windows® XP Professional operating system. Under certain conditions, some third-party software applications may not function properly.

To Change the Language Option

1. Click **Start** on the Windows® taskbar, and then click **Control Panel**.
2. Click **Date, Time, Language and Regional Options**, and then click **Regional and Language Options**. The **Regional and Language Options** dialog box appears.
3. Click the **Languages** tab.
4. From the **Language used in menus and dialogs** shortcut menu, select the desired language:
 - English
 - español
 - Português
 - Français
5. Click **Apply**. The **Change Regional Options** shortcut window appears.
6. Click **OK**.
7. Click **Start** on the Windows® taskbar, and then click **Logoff**.

 Additional users can also change to their desired language(s) without affecting your existing language settings.

Changing Numbers, Currency, Time, and Date Formats

You can change your operating system's number, currency, time, and date formats to coordinate with your chosen country or language settings.

To change these formats

1. Click **Start** on the Windows taskbar, and then click **Control Panel**.
2. Click **Date, Time, Language and Regional Options**, and click **Regional and Language Options**. The **Regional and Language Options** dialog box appears.
3. From the **Regional Options** tab, click the **Standards and formats** shortcut menu to view the available country choices. Select the desired country.
4. Click **Customize** to change the number, currency, time, and date settings.
5. Click **Apply**.
6. Click **OK**.
7. Click **OK**.

Changing the Window Design of Sony Programs

This feature changes the appearance, such as color, of certain Sony programs.

To change the window design

1. Click **Start**, and then **Control Panel**.
2. In the left panel, click **Switch to Classic View**.
3. Double-click **UI Design Selector**.
4. Click << or >> to view the designs.
5. Click **Apply** to select a design that appears in the center window. The **UI Design Selector** window design changes. The window design of certain Sony programs will match the **UI Design Selector** window.
6. Click **OK**.


Printer Connections

Your computer is compatible with many popular printers. However, to ensure the best performance, printers must be compatible with the Microsoft® Windows® operating system installed on your computer.

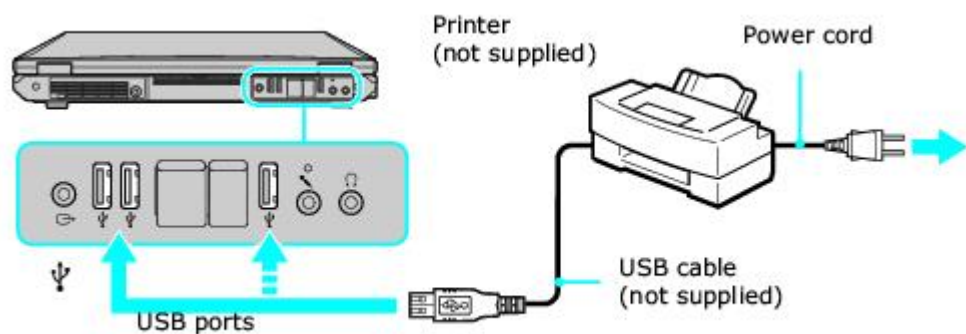
Connecting a USB Printer


You can connect a universal serial bus (USB) printer to your computer. The New Hardware Wizard enables you to easily install the printer software, but some printers require separate driver software installation. See the instructions that accompanied your printer for more information.

To connect a USB printer

1. Plug the USB cable into the USB port  on your computer or port replicator, if applicable. See "Locating Controls and Ports" in the "Setting Up" chapter of your printed VAIO® Computer Quick Start.
2. Plug the other end of the USB cable into the USB port on the printer. The **Found New Hardware Wizard** appears.

Connecting a USB Printer



 See the guide that accompanied the printer for more information on its installation and use.

Disconnecting a Printer

You can disconnect the printer cable when the computer is on or off. Disconnecting a printer when the computer is in a power saving mode (Standby or Hibernate) may cause the computer to malfunction.


To disconnect a printer

- Unplug the printer cable from the computer.

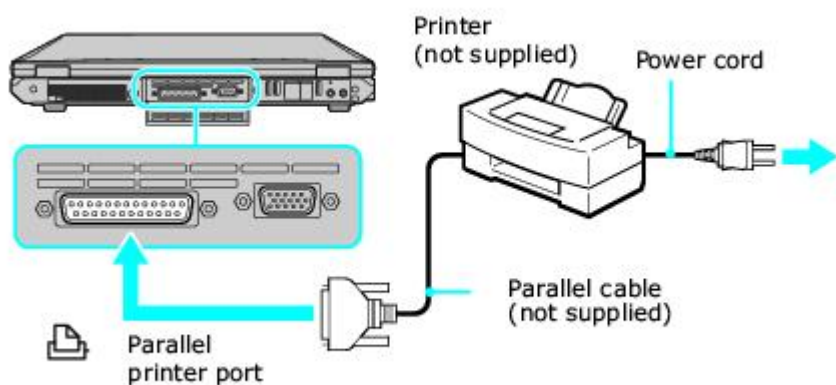
Connecting a Parallel Printer


You can connect a parallel port printer to your computer or port replicator, if applicable. The new hardware wizard enables you to easily install the printer software, but some printers require separate driver software installation. See the instructions that accompanied your printer for more information.

To connect a parallel port printer

1. Plug the printer cable into the Printer port  on your computer or port replicator, if applicable. See "Locating Controls and Ports" in the "Setting Up" chapter of your printed VAIO® Computer Quick Start.
2. Plug the other end of the printer cable into the port on the printer.
3. Restart your computer by clicking **Start, Turn Off Computer**, and **Restart**. If the **New Hardware Wizard** appears, follow the on-screen instructions.
4. Make sure the computer recognizes the printer. Follow these steps:
 - Click **Start, Control Panel, Printers and Other Hardware**, and then **Printers and Faxes**. If the computer recognizes the printer, it will be listed in the **Printers and Other Hardware** window. If the computer does not recognize the printer, you may need to install the printer driver software. See the guide that accompanied the printer for more information.


Connecting a Parallel Printer



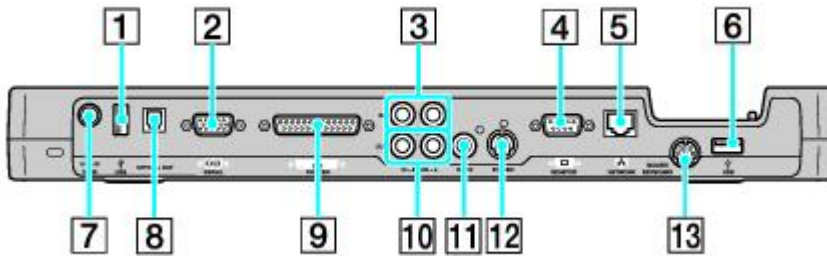
 See the guide that accompanied the printer for more information on its installation and use.

Locating Ports and Jacks

A port replicator is a device that attaches to your notebook and contains additional jacks and ports, such as USB ports. A port replicator may come with your computer, depending on the model you purchased. If you wish to purchase a port replicator, shop Sony online at <http://www.sonymstyle.com/vaio> or contact your local retailer.

 The printer port on this port replicator is intended for printer connections only.

Port Replicator (Back Panel)



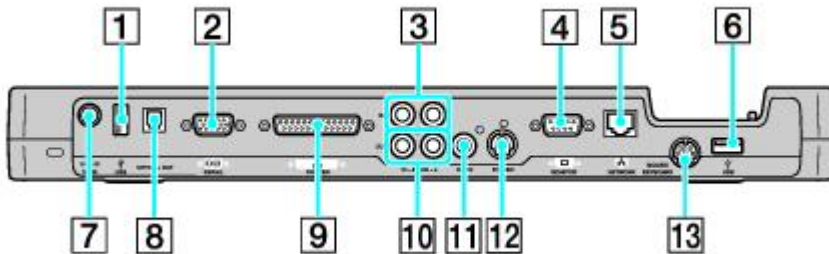
- | | |
|--------------------------------------------------------|----------------------------|
| 1 USB 2.0 port (high-/full-/low-speed) | 8 Optical Out port |
| 2 Serial port | 9 Printer port |
| 3 Audio In jacks | 10 Audio Out jacks |
| 4 Monitor (VGA) port | 11 Video Out jack |
| 5 Network (Ethernet) port (10BASE-T/100BASE-TX) | 12 S Video Out port |
| 6 USB 2.0 port (high-/full-/low-speed) | 13 PS/2 port |
| 7 DC IN port | |

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| 7 DC IN port | |

Connecting a Port Replicator

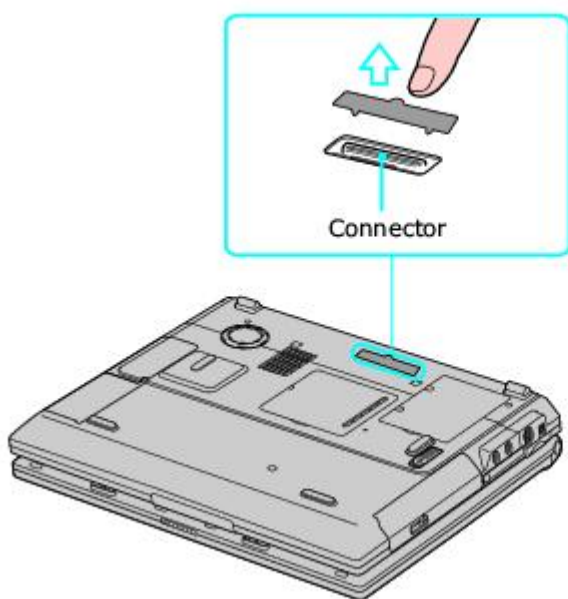
Connect a port replicator to the computer while the computer is off. Use the AC adapter (not the battery) to power the computer while it is connected to a port replicator.


 Moving the computer with the port replicator attached could disconnect the AC adapter or power cord, and may cause the computer to lose power or malfunction.

To connect a port replicator

1. Turn off the computer, and disconnect all attached devices.
2. On the bottom of the computer, slide the port replicator cover down until the port replicator connector is completely visible. Lift and remove the port replicator cover to display the port replicator connector.

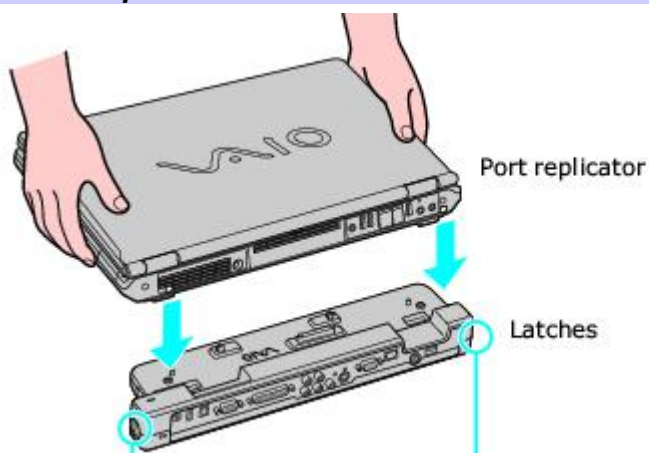
Removing the Port Replicator Cover



 You can charge the battery by installing it before you connect the port replicator. The battery automatically charges once you connect the AC adapter.

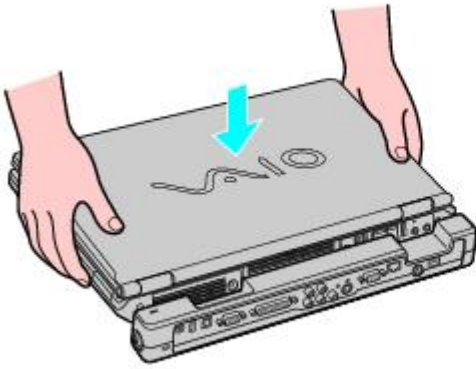
3. Align the connector on the bottom of the computer with the port replicator connector, and gently push the computer down until it clicks into place.

Connecting a Port Replicator

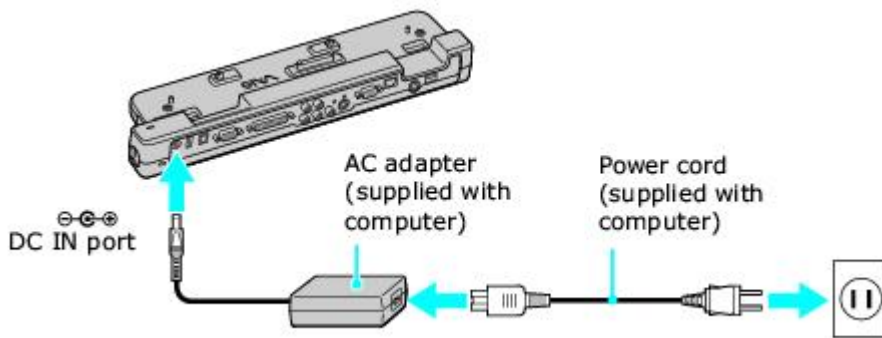


4. Make sure the port replicator is securely fastened to the computer.

Securing a Port Replicator



Connecting an AC Adapter to a Port Replicator



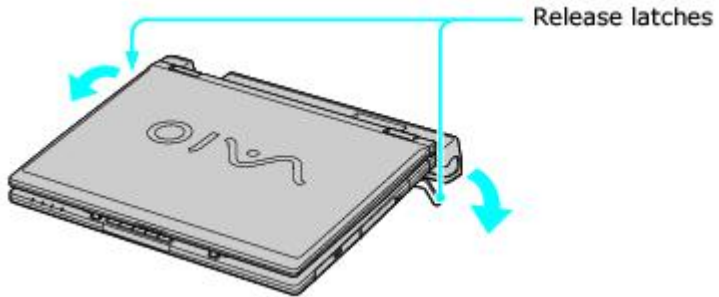
5. Plug the AC adapter into the **DC IN** port on the port replicator, and plug the power cord into the AC adapter and an AC outlet. The power indicator turns on.
6. Turn on the computer.

Disconnecting a Port Replicator

To disconnect a port replicator

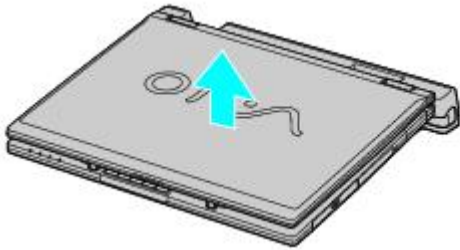
1. Close any active programs to prevent data loss.
2. Turn off the computer and disconnect the power cord.
3. Pull the release latches on each side of the port replicator to release the computer from the port replicator.

Releasing a Computer from a Port Replicator



4. Lift the computer away from the port replicator.

Disconnecting a Port Replicator



Using the Keyboard

Although your computer's keyboard is very similar to a typewriter's keyboard, you can use the additional keys on the computer's keyboard to perform specific computer-related tasks.

Using the Keyboard

Although your computer's keyboard is very similar to a typewriter's keyboard, you can use the additional keys on the computer's keyboard to perform specific computer-related tasks.

Keyboard descriptions

Key **Description**



The numeric keypad contains the keys found on a typical calculator. Use the numeric keypad to type numbers or perform mathematical calculations, such as addition and subtraction. Numbers appear on the front beveled edge of the numeric keys. Press the Num Lock key to activate the numeric keypad. (When you do so, the Num Lock indicator light turns on.) Press the Num Lock key again to deactivate the numeric keypad.



The arrow keys move the pointer on the screen. They also function as the Home, End, Page Up, and Page Down keys, respectively, when the Fn key is pressed.



The correction keys enable you to make corrections to keystrokes.



The 12 function keys along the top of the keyboard perform designated tasks. For example, in many programs, F1 is the Help key. The task associated with each function key may vary from one program to the next.



The Escape key cancels commands.



The Print Screen key takes an electronic snapshot of the screen and moves it to the Clipboard. You can then paste the screen shot into a document and print it.



The operator keys provide a variety of commands. For example, in many programs, instead of choosing the Save command from a menu, you can hold down **Ctrl** and press **S** (referred to as **Ctrl+S**). Also, the Shift key to produces capital letters or special symbols, such as @ and \$.



The Windows key opens the Start menu. It is the equivalent of clicking Start on the Windows® taskbar. See [Windows key combinations](#) for more information.




The Fn key is used in combination with other keys to issue commands. See [Fn key combinations](#) for more information.




The Applications key opens a shortcut menu of context-sensitive choices. It is the equivalent of clicking the right mouse button.


Windows key combinations


Key combination	Function
-----------------	----------


 +F1	Displays the VAIO Help and Support Center window.
------------------------------------------------------------------------------------	---------------------------------------------------

 +Tab	Switches the selected button on the taskbar.
-------------------------------------------------------------------------------------	----------------------------------------------


 +D	Displays the desktop.
-----------------------------------------------------------------------------------	-----------------------


 +E	Displays the My Computer window.
-----------------------------------------------------------------------------------	----------------------------------


 +F	Displays the Search Results window, where you can find a file or folder. This is the equivalent of selecting Search from the Start menu.
-----------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------

 +Ctrl+F	Displays the Search Results - Computers window, where you can locate other computers. This is the equivalent of selecting Search, 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 System Properties window. This is the equivalent of selecting Control Panel, and then System from the Start menu.
-----------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------

Indicator lights

Indicator Function

Power



Turns on when the power to the computer is on, blinks in Standby mode, and turns off when the computer is in Hibernate mode or off.

Battery



Turns on when the computer is using battery power, blinks when the battery is running out of power, double-blinks when the battery is charging.

Memory Stick®



Turns on when data is read from or written to the Memory Stick media. (Do not enter Standby mode or turn off the computer when this indicator is on.) When the indicator is off, the Memory Stick media is not being used.

Hard Disk



Turns on when data is read from or written to the hard disk. Do not enter Standby mode or turn off the computer when this indicator is on.

Num Lock



Press this key to activate the numeric keypad. Press it a second time to deactivate the numeric keypad. The numeric keypad is not active when the indicator is off.

Caps Lock



Press this key to type letters in uppercase. Letters appear in lowercase if you press Shift while the indicator is on. Press the key a second time to turn off the indicator. Normal typing resumes when the Caps Lock indicator is off.

Scroll Lock



Press this key to change how you scroll the display. Normal scrolling resumes when the Scroll Lock indicator is off. The Scroll Lock key functions differently depending on the program you are using and does not work with all programs.

Wireless

LAN¹ Turns on when the wireless LAN function is running.



¹ On selected models only.

Fn key combinations

Key combination	Function
-----------------	----------

Fn+F3	Toggles the built-in speakers off and on.
-------	-------------------------------------------

Fn+F4	Adjusts the built-in speaker volume. An on-screen display appears notifying you when a change occurs.
-------	-------------------------------------------------------------------------------------------------------

To increase volume, press the **Fn+F4** keys and then press the  or  key.

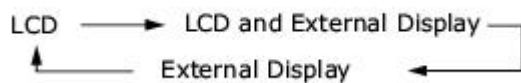
To decrease volume, press the **Fn+F4** keys and then press the  or  key.

Fn+F5	Adjusts the brightness of the computer screen (LCD).
-------	------------------------------------------------------

To increase brightness, press the **Fn+F5** keys and then press the  or  key.

To decrease brightness, press the **Fn+F5** keys and then press the  or  key.

Fn+F7	Toggles the display between the computer screen (LCD), a connected external display, and both the LCD and an external display.
-------	--------------------------------------------------------------------------------------------------------------------------------



Select one display when playing a DVD. Connect the cable(s) before you turn on the computer; otherwise, Fn+F7 will not work. You cannot use the Fn+F7 function to switch between the LCD and an external display once a DVD is inserted into the optical drive.

Fn+F12	Puts the system into Hibernate mode, a power management state. To return the system to normal operating mode, press the power button. Hibernate mode consumes the lowest level of power.
--------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Fn+Esc	Puts the system into Standby mode, a power management state. To return the system to the active state, press any key or the power button.
--------	-------------------------------------------------------------------------------------------------------------------------------------------


Connecting External Mice and Keyboards


Your computer is compatible with many popular mice and keyboards. To function properly, the device you connect must be compatible with the Microsoft® Windows® operating system installed on your computer.

Connecting a mouse or keyboard

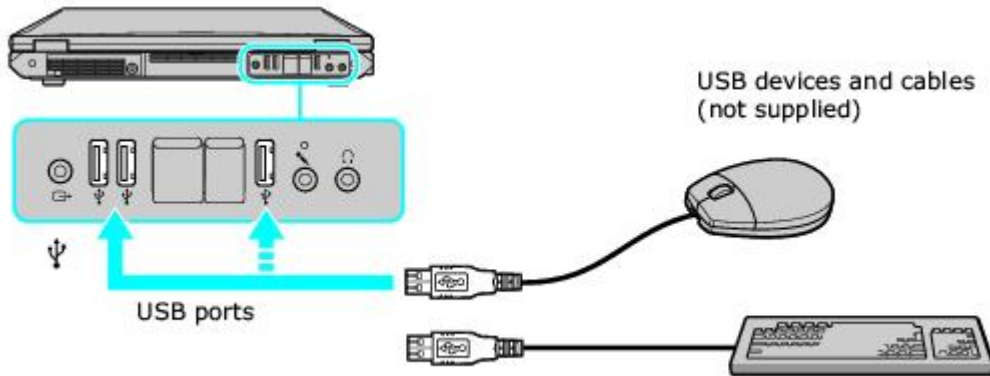
If you connect the mouse or keyboard when the computer is on, you may need to restart the computer for it to recognize the device.

To connect a USB mouse or keyboard to your computer

1. Plug the USB cable into the USB port . See "Locating Controls and Ports" in the "Setting Up" chapter of your printed VAIO® Computer Quick Start. (One USB port supports one USB connection.)
2. If the **New Hardware Wizard** appears, follow the on-screen instructions to complete the installation process.

 Although the New Hardware Wizard guides you through the software installation, some devices require separate driver software installation. See the instructions that accompanied your mouse or keyboard for more information

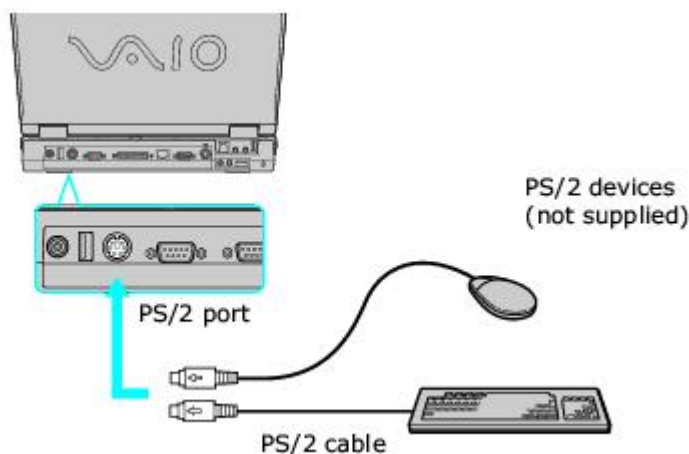
Connecting a USB Mouse or Keyboard



To connect a PS/2 mouse or keyboard

1. Connect the port replicator to the computer.
2. Plug the PS/2 cable of the mouse or keyboard into the PS/2 port.

Connecting PS/2 Mouse or Keyboard*



* The computer in this graphic may not be identical to the model you purchased.

Disconnecting a mouse or keyboard

You can disconnect a USB or PS/2 mouse or keyboard when the computer is on or off. Disconnecting the mouse or keyboard when the computer is in a power saving mode (Standby or Hibernate) may cause the computer to malfunction.

To disconnect a mouse or keyboard

- Unplug the USB or PS/2 cable from the USB or PS/2 port.

Memory Upgrades

Before you upgrade your computer's memory, read the safety information in [Precautions and Procedures](#). For the type of module and amount of memory installed on your computer, see the [Welcome](#) page to view the VAIO® Computer Specifications.

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

The procedures described below assume familiarity with the general terminology associated with personal computers and with the safety practices and regulatory compliance required for using and modifying electronic equipment. When installing a memory module in your computer, make sure you read the proper safety precautions below. Mistakes that occur when installing or removing a memory module may cause a malfunction.

- Turn off the computer. Disconnect the computer from its power source and from any telecommunications links, networks, or modems before you install or remove a memory module. Failure to do so may result in personal injury or equipment damage.
- Introducing any liquids or any foreign substances or objects into the memory slots, or other internal components of the computer, will result in damage to the computer.
- Electrostatic discharge (ESD) can damage disk drives, 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 momentarily touching an unpainted metal object that is grounded, such as a pipe, radiator, or faucet.
- Do not open the memory module package until you are ready to install the module. The package protects the module from ESD.
- Use the special protective package to store a memory module and prevent ESD.
- Only use memory modules that are compatible with your computer. For the type of module and amount of memory installed on your computer, see the [Welcome](#) page to view the VAIO® Computer Specifications. If you wish to purchase a memory module, shop Sony online at <http://www.sonymstyle.com/vaio> or contact your local retailer.


Removing and Installing Memory Modules

Make sure you read the safety information in [Precautions and Procedures](#) before you remove or install a memory module. When installing a memory module, do not open the module package until you are ready to install it. The package protects the module from Electrostatic discharge (ESD).

For memory upgrades and information about which memory modules to use, refer to your VAIO® Computer Specifications available on the [Welcome](#) page.

To remove a memory module

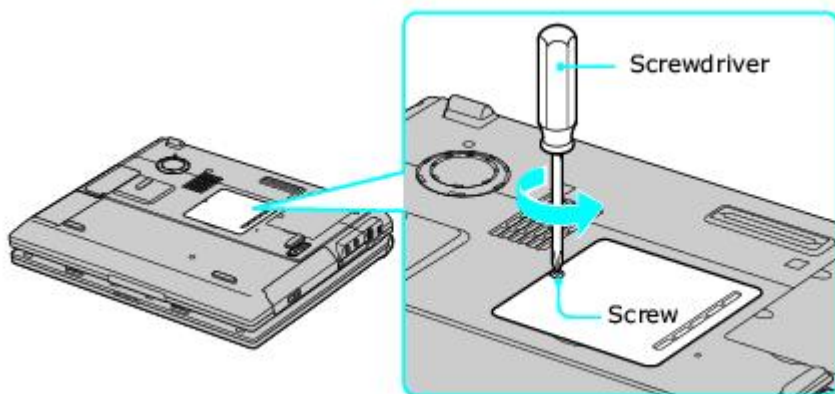
1. Turn off the computer and all attached devices.
2. Disconnect the power cord, all cables, and remove the battery if it is installed.
3. Wait for the computer to cool down.

 The interior of the computer becomes extremely hot during operation. Wait at least one hour for the computer to cool down before you remove the screws.

4. Turn the computer over and use an appropriate screwdriver to loosen and remove the screw(s) on the memory bay.

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

Removing the Bottom Screw(s)

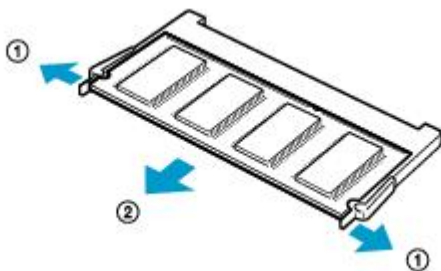


5. Touch a metal object (such as the connector panel on the back of your computer) to discharge static electricity.

 **Avoid touching any part of the motherboard or other components inside the computer.**

6. Remove the memory module by pulling out the tabs (see arrows No. 1), and pulling out the module in the direction of arrow No. 2. See [To install a memory module](#) for more information.

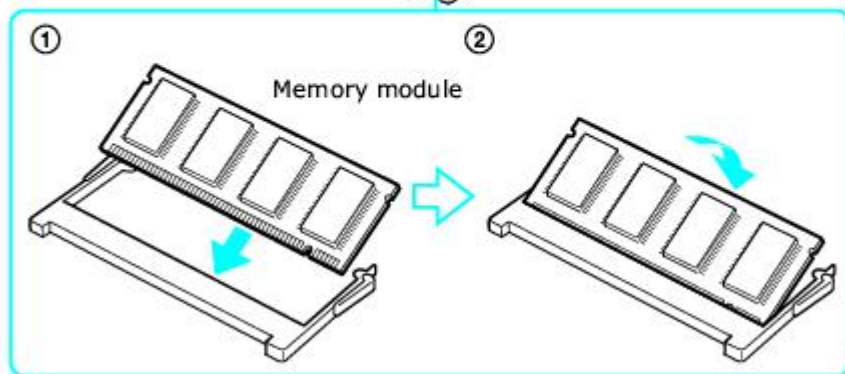
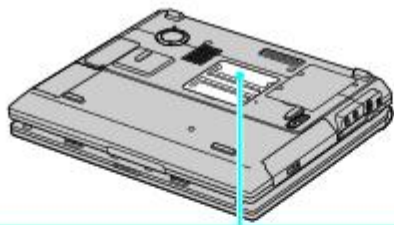
Removing a Memory Module



To install a memory module

1. Remove the new memory module from its packaging, and install the memory module by sliding it into the open slot at a 45-degree angle. See [To remove a memory module](#).

Installing a New Memory Module



2. Push the module down until it snaps into place.
3. When the module is correctly seated, close the memory bay.
4. Replace the fastening screw(s) on the memory bay.
5. Make sure the system recognizes the new memory module. See [Confirming Added Memory Capacity](#) for more information.

Confirming Added Memory Capacity

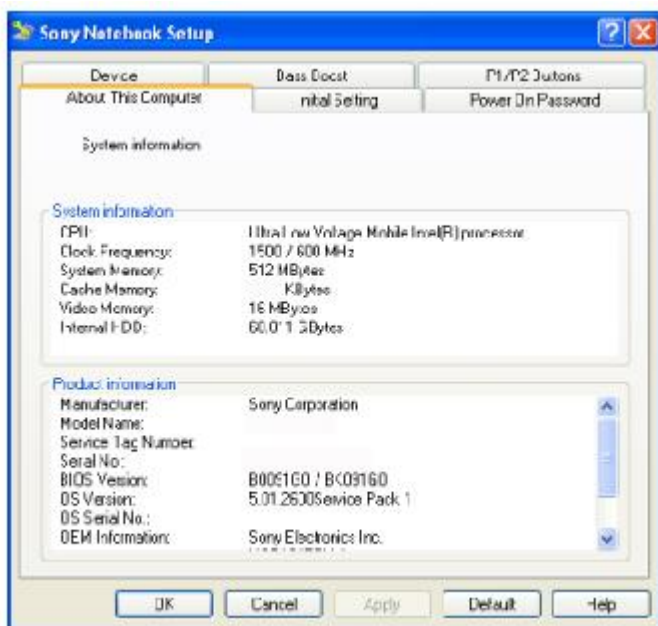
After you have installed a new memory module, make sure the operating system recognizes it.

To check your system's memory

1. Turn on the computer.
2. Click **Start** on the Windows® taskbar, point to **All Programs**, and then point to **Sony Notebook Setup**.
3. Select **Sony Notebook Setup** from the submenu. The **Sony Notebook Setup** dialog box appears.
4. On the **About This Computer** tab, make sure the **System Memory** displayed in the **System Information** box matches the amount of memory installed.

⚠ The displayed memory may be less than the installed memory due to the amount used by the display adapter.

Sony Notebook Setup



Using a Floppy Disk Drive

You can connect a floppy disk drive to your computer. The floppy disk drive enables you to read or write data to a floppy disk.



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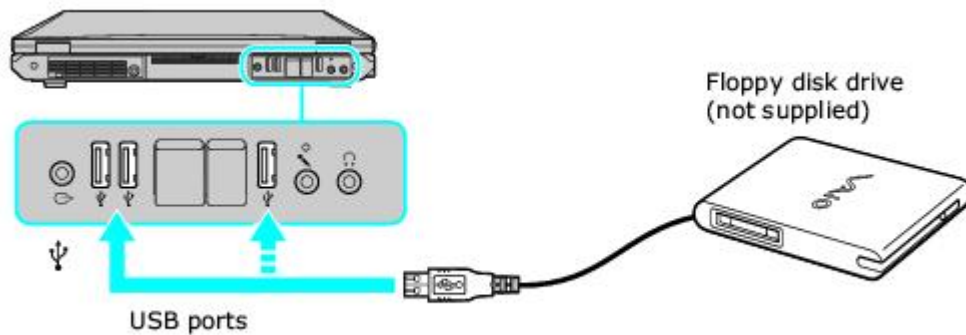
Connecting a floppy disk drive

You can connect a floppy disk drive when your computer is on or off. Connecting the drive when the computer is in a power saving mode (Standby or Hibernate) may cause the computer to malfunction.

To connect a USB floppy disk drive

1. Close any active programs to prevent data loss.
2. Plug the USB cable (with the USB icon  facing upward) into the USB port . The **Found New Hardware** pop-up message appears.

Connecting a Floppy Disk Drive



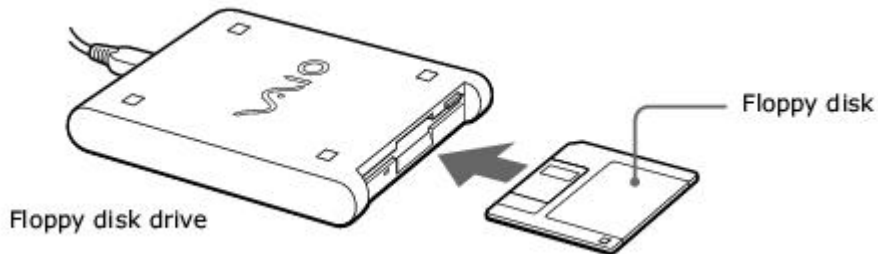
Inserting and removing floppy disks


To write data to a disk, use one that is not write-protected or disable the write-protect feature. The floppy disk drive cannot write data to a disk if it is inserted into the drive improperly.

To insert a floppy disk

1. Hold the floppy disk with the label facing up.
2. Push the floppy disk into the drive until it clicks into place.


Inserting a Floppy Disk



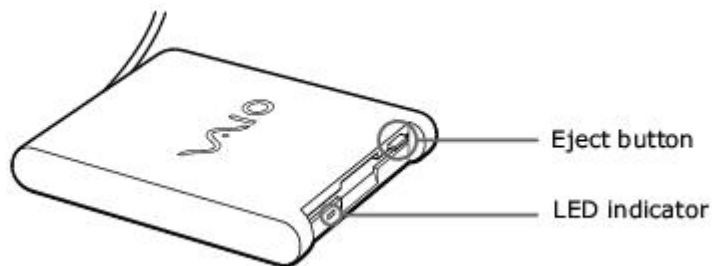
 Do not open the shutter manually and touch the surface of the floppy disk.

To remove a floppy disk

1. Close all programs that access the floppy disk.
2. Wait for the LED indicator on the floppy disk drive to turn off.
3. Push the Eject button, and remove the disk.

 To avoid losing data, do not push the Eject button when the LED indicator is on.

Removing a Floppy Disk




Protecting floppy disks

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

Disconnecting a floppy disk drive

You can disconnect a USB floppy disk drive when the computer is on or off. Disconnecting the drive when the computer is in a power saving mode (Standby or Hibernate) may cause the computer to malfunction.

1. Close all programs accessing the floppy disk drive.
2. Double-click the **Safely Remove Hardware** icon  on the taskbar. The **Safely Remove Hardware** window appears.
3. Select the floppy disk drive in the **Hardware devices** window, if it is not already selected.
4. Click **Stop**. The **Stop a Hardware device** window appears.
5. Make sure the **floppy disk drive is selected**, and click **OK**. A message appears stating it is now safe to remove the hardware device.
6. Remove the floppy disk drive from the computer.

Storing a floppy disk drive

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

Storing a Floppy Disk Drive



What do I do if my computer won't start?

- Make sure the computer is securely plugged into a power source and turned on. Make sure the power indicator shows the power is on.
- Make sure the battery is inserted properly and charged.
- Make sure the floppy disk drive (if applicable) is empty.
- If the computer is plugged 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, make sure it is plugged into a power source and turned on. Make sure the brightness and contrast controls are adjusted correctly. See the guide that came with your display for details.
- Disconnect the AC adapter and remove the battery. Wait one minute. Reattach the AC adapter and reinsert the battery. Turn on the power.
- Condensation may cause the computer to malfunction. If this occurs, do not use the computer for at least one hour.
- If the computer still does not turn on, follow these steps:
 1. Unplug the power cord and remove the battery.
 2. Use a thin, straight object (such as a paper clip) to press the reset button.
 3. Reinsert the power cord and the battery.
 4. Turn on the computer.

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 3. Reinsert the power cord and the battery.
 4. Turn on the computer.



What do I do if a BIOS error appears when my computer starts?

If the message "Press <F1> to resume, <F2> to setup" appears at the bottom of the screen, follow these steps:

1. Press the **F2 key**. The **BIOS Setup** menu appears.
2. Set the date (month/day/year). Press **Enter**.
3. Press the **Down Arrow** key ↓ to select **System Time**, and then set the time (hour: minute: second). Press **Enter**.
4. Press the **Right Arrow** key → to select the **Exit** tab, and then press the **Down Arrow** key ↓ to select **Get Default Values**. The message **Load default values for all SETUP items** appears.
5. Press **Enter**. The **Setup Confirmation** window appears.
6. Select **Yes**, and press **Enter**.
7. Select **Exit (Save Changes)**, and press **Enter**. The **Setup Confirmation** window appears again.
8. Select **Yes**, and press **Enter**. The computer restarts.

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


What do I do if the message "Operating system not found" appears when my computer starts, and why won't Windows start?

- Make sure the computer does not have a "non-bootable" floppy disk in the floppy disk drive (if applicable).
- If a non-bootable floppy disk is in the drive:
 1. Remove the floppy disk.
 2. Restart the computer and confirm that the Microsoft® Windows® operating system starts properly.
- If Windows still does not start, follow these steps to initialize the BIOS:
 1. If there is a disk in the floppy disk drive, then remove it.
 2. Turn off the computer.
 3. Remove any peripheral devices connected to the computer.
 4. Restart the computer.
 5. Press the **F2 key** when the Sony logo appears. The **BIOS Setup** window appears.
 6. Press the **Right Arrow** key  to select the **Exit** menu.
 7. Press the **Down Arrow** key  to select **Get Default Values**. The message **Load default values for all SETUP items** appears.
 8. Press **Enter**. The **Setup Confirmation** window appears.
 9. Select **Yes**, and press **Enter**.
 10. Select **Exit (Save Changes)**, and press **Enter**. The **Setup Confirmation** window appears again.
 11. Select **Yes**, and press **Enter**. The computer restarts.

What do I do if my computer stops responding?

It is best to turn off your computer using the Turn Off Computer option on the Microsoft® Windows® Start menu, located on the taskbar. Using other methods, including those listed below, may result in loss of unsaved data.

- Click **Start** on the Windows® taskbar, select **Turn Off Computer**, and then click **Turn Off**.
- If your computer does not turn off, press the **Ctrl+Alt+Delete** keys simultaneously. When the **Windows Task Manager** dialog box appears, click **Turn Off** from the **Shut Down** menu.
- If your computer still does not turn off, press and hold the power button or slide and hold the power switch until the computer turns off.
- If your computer stops responding while playing a CD or DVD, press the **Ctrl+Alt+Delete** keys simultaneously. You can turn off the computer from the **Windows Task Manager**.



 Pressing the **Ctrl+Alt+Delete** keys simultaneously or turning off the computer with the power button or switch may cause loss of data.

- Remove the AC adapter and battery.

Why won't my computer enter Standby or Hibernate mode?

Your computer may become unstable if the operating mode is changed before the computer completely enters Standby or Hibernate.



To restore the computer to normal operating stability:

1. Close all open programs.
2. Restart the computer. Follow these steps:
 1. Press the **Windows** key .
 2. Press **U**.
 3. Press **R** to select restart.
3. If the computer does not restart, follow these steps:
 1. Press the **Ctrl+Alt+Delete** keys simultaneously. The **Windows Task Manager** window appears.
 2. Press and release **Alt** to highlight the menu bar, and press the **Right Arrow**  key to select Shut Down.
 3. Press **Enter**.
 4. Press **R** to select restart.
4. If this procedure does not work, press and hold the power button or slide and hold the power switch until the computer turns off.

Why is the sound of my computer's fan so loud?

The computer's fan may be running at a high speed to cool the CPU. By lowering the CPU speed, you also lower the speed and noise level of the computer's fan. If your computer comes with the PowerPanel utility¹, use it to lower the CPU speed. If your computer does not come with the PowerPanel utility, use the power schemes to lower the CPU speed.

To lower the CPU fan speed using the PowerPanel utility²:

1. On the Windows® taskbar, right-click the **CPU** icon  or **Profile** icon , depending on the model you purchased.
2. Select **Edit/Create Profiles**. The **AC Power - Profile Editor** window appears.
3. Double-click **System** to open the **System** submenu if it is not already open.
4. Double-click **CPU Fan Control**, and select **Level 1 Quiet**.
5. Restart your computer.

 See PowerPanel Help for more information.

To lower the CPU speed using the power schemes³:

1. Click **Start** on the Windows® taskbar, and click **Control Panel**.
2. Click **Performance and Maintenance**, and click **Power Options**. The **Power Options Properties** window appears.
3. Select **Portable/Laptop** in the **Power schemes** box.
4. Click **Apply**.
5. Click **OK**.

¹ Available on selected models.


² Available on selected models only.

³ Available on selected models only.

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

This is normal. Because your computer's CPU utilizes a type of CPU speed controlling technology for power conservation purposes, System Properties may display the CPU's current speed instead of the maximum speed.

Why don't my changes appear on the computer screen (LCD)?

You may need to refresh the computer screen. Press and hold the **Windows** key  , and press **D** twice.

What is HyperThreading technology, and how do I enable or disable it?

Your computer is provided with a CPU supporting HyperThreading technology that enables parallel execution of two software processes (software threads) on a single processor.

When the HT technology is enabled, some software such as drivers and applications may be disabled. If your computer does not provide successful operations, you may disable the HT technology. If you disable HT technology, however, your computer's system performance may be degraded, depending on usage, as the parallel execution capability is disabled.

To disable HyperThreading technology

1. Click **Start** from the Windows® taskbar, select **Turn Off Computer**.
2. Press the power button to turn on your computer, then immediately press the **F2** key. The BIOS setup page appears.
3. Select **Advanced** from the main menu bar.
4. Select **HyperThreading Technology** and press **Enter**. A pop-up menu appears.
5. Select **Disabled** and press **Enter**.
6. Select **Exit** from the main menu bar and press **Enter**.
7. Select **Exit Saving Changes** and press **Enter**.
8. Select **Yes**. Your computer restarts.

To enable HyperThreading technology

1. Click **Start** from the Windows® taskbar, select **Turn Off Computer**.
2. Press the power button to turn on your computer, then immediately press the **F2** key. The BIOS setup page appears.
3. Select **Advanced** from the main menu bar.
4. Select **HyperThreading Technology** and press **Enter**. A pop-up menu appears.
5. Select **Enabled** and press **Enter**.
6. Select **Exit** from the main menu bar and press **Enter**.
7. Select **Exit Saving Changes** and press **Enter**.
8. Select **Yes**. Your computer restarts.

How do I know when the battery is charged?

To determine the remaining battery charge, see [Locating battery information](#).

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When is the computer using AC power?

When the computer is directly connected to the AC adapter, it uses AC power, even if a battery is installed.

When should I recharge the battery?

- When the battery level falls below 10 percent.
- When both the battery and power indicators blink.
- When you have not used the battery for a long time.

When should I replace the battery?

If the battery power is still low after charging it, the battery may be reaching the end of its life and should be replaced.

Should I be concerned that the installed battery is warm?

No, it is normal for the battery to be warm when it is powering the computer.

Can my computer enter Hibernate mode while using battery power?

Your computer can enter Hibernate mode while using battery power, but some software programs and peripheral devices prevent the system from entering Hibernate mode. If you are using a program that prevents the system from entering Hibernate mode, save your data frequently to avoid losing data. See [To activate Hibernate mode](#) for information on how you can manually activate Hibernate mode.

Why doesn't my computer enter Hibernate mode?

You may first need to enable Hibernate mode. Follow these steps:

1. Click **Start** on the Windows® taskbar, and click **Control Panel**.
2. Click **Performance and Maintenance**, and click **Power Options**. The **Power Options Properties** window appears.
3. Select the **Hibernate** tab.
4. Click to check the box next to **Enable hibernation**.

Why can't I use the DV recorder?

You may not be able to use the DV recorder, and the message **DV equipment seems to be disconnected or turned off** may appear because the i.LINK[®] cable is not securely plugged into the ports on the computer or camera. Unplug the connectors, and plug them in again. See [Connecting an i.LINK digital video recorder](#) for more information.

¹ i.LINK is a trademark of Sony used only 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 connection may not communicate with each other. Refer to the documentation that came with your compatible i.LINK device for information on operating conditions and proper connection. Before connecting compatible i.LINK PC peripherals to your system, such as CD-RW or hard disk drive, confirm their operating system compatibility and required operating conditions.

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Why doesn't my modem work?

- Make sure the telephone cable is securely plugged into the Modem jack on the computer and the wall jack.
- Make sure the telephone cable is working. Plug the cable into an ordinary telephone and listen for a dial tone.
- Make sure the telephone number the program is dialing is correct.
- Make sure the software you are using is compatible with the computer's modem. (All preinstalled Sony programs are compatible.)

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- Make sure the software you are using is compatible with the computer's modem. (All preinstalled Sony programs are compatible.)

Why is my modem connection slow?

Your computer 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), follow these steps:

- Ask your telephone company to verify your telephone line is free of any line noise.
- If your problem is fax-related, make sure 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 ISP, make sure the ISP is not experiencing technical problems.
- If you have a second telephone line, try connecting the modem to that line.

Why can't my computer connect to a wireless LAN access point?

- Connection availability is affected by distance and obstructions. You may need to move your computer away from obstructions or closer to any access point you may be using.
- Make sure the Wireless LAN switch on the computer is on.
- Make sure power to the access point is on.
- Make sure the access point is displayed in the Available networks window.
- Make sure the encryption key is correct.

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- Make sure the Wireless LAN switch on the computer is on.
- Make sure power to the access point is on.
- Make sure the access point is displayed in the Available networks window.
- Make sure the encryption key is correct.

Why can't I access the Internet?

- Check the access point settings. Refer to the instructions supplied with the access point.
- Make sure your computer and the access point are connected to one another.
- Move your computer away from obstructions or closer to any access point you may be using.
- Make sure your computer is properly configured for Internet access.

Why is the data transfer speed 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 computer 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 how many other devices are communicating via the access point.
- If your access point interferes with other access points, change the access point channel. See your access point instructions for more information.

Why is the communication speed 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 IEEE 802.11b standard or both the IEEE 802.11b and IEEE 802.11g standards (selected models only). High-rate stream transfers with MPEG2 data may lower this rate.

How do I avoid data transfer interruptions?

- When your computer is connected to an access point, data transfer interruptions may occur when using large files or if the computer is in close proximity to microwaves and cordless telephones.
- Move the computer closer to the access point.
- Make sure the access point connection is intact. For more information, see [Checking your network connection status](#).
- Change the access point channel. See your access point instructions for more information.

Can I connect to an IEEE 802.11a device?

Computers with built-in wireless LAN support the IEEE 802.11b standard only. Devices connecting to a wireless LAN using the IEEE 802.11a standard cannot connect to devices using the IEEE 802.11b standard.

What are channels?


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 you are using a wireless LAN access point, refer to connectivity information contained in your access point instructions.


When I change the encryption key, the network connection stops. What do I do?

Two computers with built-in wireless LAN may lose a peer-to-peer network connection if the encryption key is changed. You can either change the encryption key back to the original profile or restart both computers.

Why doesn't my microphone work?

If you are using an external microphone, make sure the microphone is turned on and is properly plugged into the Microphone jack  on the computer.

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
What do I do if the computer doesn't recognize the mouse?

- Make sure the mouse is securely plugged into the port.
- Restart the computer with the mouse connected to the computer.

What do I do if the computer doesn't recognize the mouse?

- Make sure the mouse is securely plugged into the port.
- Restart the computer with the mouse connected to the computer.

What do I do if the pointer doesn't move when I use the mouse?

- Make sure another mouse is not installed.
- If you are playing a disc, press the **Ctrl+Alt+Delete** keys simultaneously to stop playback and restart the computer.
- If you still cannot use the pointer, restart the computer. You can restart the computer three different ways:
 - Press the **Windows** key , and press **U**. When the **Turn Off Computer** window appears, press **R**.
 - Press the **Ctrl+Alt+Delete** keys simultaneously. When the **Windows Task Manager** window appears, press the **Alt** key to highlight the menu bar, and press the **Right Arrow** key  to select **Shut Down**. Press **Enter**, and then press **R**.
 - Press and hold the power button. When the computer turns off, press the power button again to restart the computer.

Why won't my speakers work?

- Make sure the speakers are properly connected and the volume is turned up loud enough to hear sound.
- Your speakers may not be designed for computer use.
- If the speakers have a mute button, set the button to off.
- If the speakers have a volume control, make sure the volume is turned up loud enough to hear sound.
- If you have connected an audio cable to the Headphones jack, disconnect the cable and use the speaker cable that was supplied with the speakers.
- If you are using battery power, make sure the battery is inserted properly and is charged.
- If the speakers require external power, make sure the speakers are connected to a power source. See the guide that accompanied the speakers for more information.

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- If the speakers require external power, make sure the speakers are connected to a power source. See the guide that accompanied the speakers for more information.

Why can't I hear sound from my speakers?

- If the computer is using battery power, make sure the battery is properly inserted and is charged.
- If you are using a program that has its own volume control, make sure the volume control is properly set. See that program's help guide for more information.
- Your speakers may be set to mute, the volume setting may be too low, or the audio option may be disabled. See [Adjusting the volume](#) and [Enabling the audio feature](#) for more information.


Why don't the Fn+F3 or the Fn+F4 key combinations work?

The Fn+F3 keys toggle the built-in speakers on and off. The Fn+F4 keys adjust the built-in speaker volume. The computer may not recognize the Fn+F3 and Fn+F4 keys if the correct speakers are not selected. Follow these steps:

1. Right-click the **Volume** icon  on the taskbar, and select **Adjust Audio Properties**.
2. On the **Volume** tab, click **Advanced** in the **Speaker settings** box. The **Advanced Audio Properties** window appears.
3. On the **Speakers** tab, select the correct speaker setup from the **Speaker setup** drop-down menu.



Why do I hear noise distortion while listening to music with speakers or headphones?

You may experience noise distortion while listening to music with speakers or headphones if the CPU control is set to Automatic Profile Selection. If your computer is using battery power, use the preinstalled PowerPanel program to set the CPU control to Maximum Performance. Follow these steps:

- Right-click the **CPU** icon  or the Profile icon , point to **Profiles**, and select **Maximum Performance**.

[↑](#) Profile icon available on selected models only.



What do I do if the touch pad does not work?

- Try restarting your computer. Follow these steps:
 1. Press the **Windows** key .
 2. Press **U**. The **Turn off computer** window opens.
 3. Press **R** to restart the computer.
- If the computer does not restart, follow these steps:
 1. Press the **Ctrl+Alt+Delete** keys simultaneously. The **Windows Task Manager** window appears.
 2. Press and release **Alt** to highlight the menu bar, and press the **Right Arrow** key  to select **Shut Down**.
 3. Press **Enter**.
 4. Press **R** to restart the computer.
- If you still cannot restart your computer, press and hold the power button to turn off the computer.
- If the pointer does not move while playing a disc, press **Ctrl+Alt+Delete** simultaneously to stop playback and restart the computer.
- If you are still experiencing problems, make sure another mouse is not installed.
- You may have disabled the touch pad without connecting a mouse to the computer. See [To enable the touch pad](#).

If your computer is interpreting a single-click as a double-click, you may want to change the button assignments. Follow these steps:

1. Click **Start** on the Windows® taskbar and click **Control Panel** and **Printers and Other Hardware** and **Mouse**. The **Mouse Properties** dialog box appears.
2. On the **Buttons** tab, select your preferences in the **Button Selection** box.
3. Click **Apply** to install your settings.
4. Click **OK** to close the window.

What do I do if the touch pad does not work?

- Try restarting your computer. Follow these steps:
 1. Press the **Windows** key .
 2. Press **U**. The **Turn off computer** window opens.
 3. Press **R** to restart the computer.
- If the computer does not restart, follow these steps:
 1. Press the **Ctrl+Alt+Delete** keys simultaneously. The **Windows Task Manager** window appears.
 2. Press and release **Alt** to highlight the menu bar, and press the **Right Arrow** key  to select **Shut Down**.
 3. Press **Enter**.
 4. Press **R** to restart the computer.
- If you still cannot restart your computer, press and hold the power button to turn off the computer.
- If the pointer does not move while playing a disc, press **Ctrl+Alt+Delete** simultaneously to stop playback and restart the computer.
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3. Click **Apply** to install your settings.
4. Click **OK** to close the window.

How do I maintain CDs and DVDs?

- Avoid touching the surface of the disc with your fingers. Fingerprints and dust on the surface of the disc may cause reading errors.
- Try using canned compressed air to clean dusty discs.
- Do not clean the disc with solvents (such as benzine, thinner, alcohol, commercially available cleaners, or anti-static spray), which may damage the disc. To clean the disc, follow these steps:
 1. Hold the edge of the disc, and use a soft cloth to wipe the surface from the center out.
 2. 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.
 3. Wipe off any remaining moisture with a dry, soft cloth.
- Do not drop or bend the disc.

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 3. Wipe off any remaining moisture with a dry, soft cloth.
- Do not drop or bend the disc.


Why does my computer freeze when I try to read a disc?


- The disc your computer is trying to read may be dirty or damaged. Follow these steps:
 1. Restart the computer by clicking **Start, Turn Off Computer**, and **Restart**.
 2. Eject the disc from the optical drive.
 3. Examine the disc for dirt or damage. If the disc is dirty, see [How do I maintain CDs and DVDs?](#) for instructions on how to clean it.


What do I do if the drive tray won't open?

- Make sure the computer is on.
- Press the Eject button on the optical drive.
- If the Eject button does not work, click **Start** on the Windows® taskbar, and click **My Computer**. Right click the optical drive icon, and select **Eject** from the shortcut menu.
- If none of the above options work, insert a thin, straight object (such as a paper clip) in the manual eject hole near the Eject button.

What do I do if the optical drive isn't playing my CD or DVD properly?

- Make sure the disc was inserted into the drive with the label facing up.
- Make sure the necessary program(s) is installed according to the manufacturer's instructions.
- If the CD or DVD is dirty or damaged, the computer will stop responding. Follow these steps:
 1. Restart the computer by pressing the **Ctrl+Alt+Delete** keys, and selecting **Restart** from the **Shut Down** menu of the **Windows Task Manger** dialog box.
 2. Remove the CD or DVD from the optical drive.
 3. Check the disc for dirt or damage. If you need to clean the disc, see [How do I maintain CDs and DVDs?](#) for instructions.
- If you are playing a CD or DVD and cannot hear sound, follow these steps:
 1. Double-click the **Volume** icon  on the **Taskbar Notification** area, and click to cancel the **Volume Control Mute All** and **Wave Mute** check boxes.
 2. Check the volume setting in the audio mixer.
 3. If you are using external speakers, check the volume settings on the speakers and the connections between the speakers and the computer.
 4. Make sure the CD audio feature is enabled and the correct driver software is installed. Follow these steps:
 1. Click **Start** on the Windows® taskbar, click **Control Panel, Performance and Maintenance, and System**. The **System Properties** window appears.
 2. Select the **Hardware** tab, and click **Device Manager** in the **Device Manager** box. A window with a listing of the computer's hardware devices appears.

 If an "X" or an exclamation point appear on the listed device, you may need to enable the device or reinstall the drivers.
 3. Double-click the optical drive device to open the submenu.
 4. Double-click the listed drive, and select the **Properties** tab.
 5. Click to select the **Enable digital CD audio for this CD-ROM device** check box, if it is not selected.

 You can confirm the driver software by selecting the **Driver** tab, and clicking **Driver Details**.
 6. Click **OK** to close the window.
- Make sure an adhesive label was not attached to the CD or DVD. Adhesive labels can come off while the disc is in the optical drive and damage the drive or cause it to malfunction.
- If a region code warning appears, the disc may be incompatible with the optical drive. Check the DVD package to make sure the region code is compatible with the optical drive.
- If you notice condensation on the computer, do not use the computer for at least one hour. Condensation can cause the computer to malfunction.

Why did the computer screen (LCD) go blank?

- Your computer screen may go blank if the computer has lost power or has entered a power saving mode (Standby or Hibernate). If the computer is in LCD (Video) Standby mode, press any key to activate the computer screen. See [Using power saving modes](#) for more information.
- Make sure the computer is plugged into a power source and is on. The power indicator on the computer will be on if the computer is on.
- If your computer is using battery power, make sure the battery is inserted properly and is charged. See [Using the Battery](#) for more information.
- If the display mode is set to external display, use the **Fn+F7** key combination. See [Selecting a display](#) for more information.

Why can't I view the entire DVD video display on a TV screen?


The display resolution may not be properly set. To adjust the display resolution, see [Selecting a display](#) for more information. It is recommended that you adjust the display resolution to 1024 x 768 or smaller, depending on the size of the external display screen.

How do I adjust the image on the TV screen?

Use the controls on your external display to adjust the image. See the help guide that accompanied your display for more information.

How do I change the video resolution on the TV screen?

The video may not appear on the entire TV screen if your computer resolution is set larger than 1024 x 768. Adjust the video resolution to 1024 x 768 or smaller.

 If you are using the A/V Out jack, plug the audio-video (AV) cable into the computer before you start the computer.

To change the video resolution, follow these instructions:

1. Right-click the desktop, and select **Properties** from the shortcut menu. The **Display Properties** dialog box appears.
2. Select the **Settings** tab.
3. Move the screen resolution slider to the left to reduce the size and to the right to increase the size of the video resolution.

How do I switch the computer screen (LCD) from LCD to TV?

Press the **Fn+F7** keys to view the image on either the computer screen (LCD) or the TV. See [Selecting a display](#) for more information.

 **The Fn+F7 key combination will not work once a DVD is inserted into the optical drive. Switching the display while a DVD is playing may cause the computer to malfunction, and you may need to restart the DVD software.**

Why can't I open my image files?

You may need to reformat your Memory Stick® media.

 **Formatting Memory Stick media erases all data, including music data, previously saved to it. Before you reformat Memory Stick media, back up important data and confirm that the media does not contain files you want to keep.**

1. Copy the data from the Memory Stick media onto your computer's hard disk to save data or images.
2. Format the Memory Stick media using Memory Stick Formatter software preinstalled on your computer. For instructions about formatting a Memory Stick media, see [Formatting Memory Stick media](#).

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Why can't I save music files onto my 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.
- Using recorded music 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.

Can I copy images from a digital video camera using Memory Stick media?

Yes, and you can view video clips that you have recorded with Memory Stick media-compatible video camera recorders.

How do I prevent damage to the Memory Stick media?

- 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.

How do I extend the life of the Memory Stick media?

- Use the supplied storage case. See the instructions that came with your media for more information on its use.
- 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

Why doesn't my PC Card work?

- Make sure the PC Card is inserted properly. See [Inserting PC Cards](#) for more information.
- Make sure the PC Card is compatible with the Microsoft® Windows® operating system installed on your computer.
- See the instructions that accompanied your PC Card. You may need to install driver software if you are not using a Sony PC Card.

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- Make sure the PC Card is inserted properly. See [Inserting PC Cards](#) for more information.
- Make sure the PC Card is compatible with the Microsoft® Windows® operating system installed on your computer.
- See the instructions that accompanied your PC Card. You may need to install driver software if you are not using a Sony PC Card.

Why doesn't my computer recognize attached devices?


For some PC Cards, if you alternate between normal power operation and the Standby or Hibernate modes while the card is inserted into the PC Card slot, the computer may not recognize the PC Card or the connected device. Restart your computer.

Why can't I insert my PC Card?

- Make sure you are inserting the card correctly. See [Inserting PC Cards](#) for more information.
- You may not be able to use some PC Cards or some functions of the PC Card with this computer. Check the guide that accompanied your PC Card for more information on its use.


Why can't I print a document?

- Make sure the printer is on, and the printer cable is securely connected to the ports on your printer and computer.
- Make sure the printer is compatible with the Microsoft® Windows® operating system installed on your computer.
- You may need to install the printer driver software before you use the printer. See the guide that accompanied the printer for more information.
- If the printer is not functioning after the computer resumes from a power saving mode (Standby or Hibernate), then restart the computer.
- If the bidirectional communication functions are provided with your printer, disabling the functions on your computer may enable printing. Follow these steps:
 1. Click **Start**, and then **Control Panel**.
 2. Click **Printers and Other Hardware**.
 3. Click **Printers and Faxes**.
 4. Right-click an unused printer and select **Properties**.
 5. Click the **Ports** tab.
 6. Click to cancel the **Enable bidirectional support** check box.
 7. Click **OK**.

 This change to the settings disables the bidirectional communication functions of your printer, such as data transfer, status monitoring, and remote panel.



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Why doesn't the Safely Remove Hardware icon appear on the taskbar when the drive is connected?

The computer does not recognize the floppy disk drive. First, make sure the USB cable is properly connected to the USB port. If you need to secure the connection, wait a few moments for the computer to recognize the drive. If the icon still does not appear, follow these steps:

1. Close all programs that were accessing the floppy disk drive.
2. Wait for the LED indicator on the floppy disk drive to turn off.
3. Push the Eject button, and remove the disk.
4. Reconnect the floppy disk drive by inserting the USB connector (with the USB icon  facing upward) into the USB port .
5. Restart the computer by clicking **Start** on the Windows® taskbar, **Turn Off Computer**, and then **Restart**.

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1. Close all programs that were accessing the floppy disk drive.
2. Wait for the LED indicator on the floppy disk drive to turn off.
3. Push the Eject button, and remove the disk.
4. Reconnect the floppy disk drive by inserting the USB connector (with the USB icon  facing upward) into the USB port .
5. Restart the computer by clicking **Start** on the Windows® taskbar, **Turn Off Computer**, and then **Restart**.

Why is the drive unable to write data to a floppy disk?

Make sure the floppy disk is properly inserted in the drive. See [Inserting and removing floppy disks](#) for instructions on how to insert the disk properly.

If the disk is inserted properly and you are still unable to write data to it, the disk may be full or write-protected. You can either use a floppy disk that is not write-protected or disable the write-protect feature.

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

1 VAIO® Computer Documentation

The on-screen VAIO® Computer User Guide and the printed VAIO® Computer Quick Start provide information on how to maximize your computer capabilities and solve common problems.

2 Program Guides and Help Files

The preinstalled programs on your computer may come with individual help guides. These guides are stored on the hard disk as on-screen Help files. You can find the Help files from the Help menu under the specific program.

3 Operating System Online Support

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

4 Sony Computing Support

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

Program Support Information

Depending on the configuration you purchased, your computer may not include all of these software programs listed below.

Adobe® Reader® *Adobe Systems Inc.*

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

Support:

web site <http://www.adobe.com>

telephone 800-685-3652

hours M - F, 6 AM - 5 PM PST

Adobe® Photoshop® Elements *Adobe Systems Inc.*

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

Support: See Adobe® Reader®

Adobe® Premiere® LE *Adobe Systems Inc.*

Adobe Premiere LE software offers interface and editing tools for producing movies for video, multimedia, and 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. Upgrade possible to full version of Adobe® Premiere® software.

Support: See Adobe® Reader®

Adobe® Premiere® *Adobe Systems Inc.*

Professional digital video editing software that enables you to create professional video productions. Take advantage of the sophisticated new Adobe Title Designer, MPEG-2 export, DVD authoring, and powerful audio tools.

Support: See Adobe® Reader®

America Online® (Broadband or Dial-Up) *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.

Support:

web site <http://www.aol.com>

AT&T WorldNet® Service *AT&T Corp.*

AT&T WorldNet Service offers fast, reliable Internet access. Customer benefits include Web-based e-mail, video e-mail, multiple e-mail accounts, free Web pages, online and live agent technical support, instant messaging, and parental controls.

Support:

web site <http://help.att.net>

Boingo Wireless

Boingo Wireless, Inc.

Boingo Wireless service offers Wi-Fi access in hundreds of hot spot locations, including airports, hotels, coffee shops, and other public spaces. Experience the Internet up to 100 times faster than dial-up, and enjoy being totally mobile.

Support:

web site <http://www.boingo.com/servicecenter.html>

telephone 800-880-4117

e-mail support@boingo.com

hours M - F, 4 AM - 10 PM PST
Sat-Sun, 6 AM - 3 PM PST

Click to DVD

Sony Electronics Inc.

At the touch of a button, Click to DVD software allows you to automatically burn DVDs from a digital video device. Create DVDs by capturing video content straight from a digital video (DV) device or by importing video from stored files — and you can also edit the video if desired. Create DVD photo albums and slide shows with picture files or by importing pictures from a digital still camera. What's more, you can easily give a professional look to your DVDs by adding chapter menus, backgrounds, and menu screens. You're only a few clicks away from your own DVDs!

Support: Sony Electronics, see VAIO® Support Agent

CLIE Converter

Sony Electronics Inc.

CLIE Converter software is a plug-in application that converts Giga Pocket® Video Capsules into Movie Player format for playback on your Sony® CLIE handheld. After converting your Video Capsules, you can use CLIE Converter software to transfer them to Memory Stick® media or to save them to your hard disk drive for transfer to your CLIE handheld during your next HotSync® operation.

Support: Sony Electronics, see VAIO Support Agent

Corel® WordPerfect®

Corel Corp.

WordPerfect software is a powerful word-processing tool that helps you produce newsletters, articles, reports, proposals, books, and other documents. This software enables you to add graphics, tables, and charts to documents. You can publish to paper, electronic media, and the World Wide Web. WordPerfect 10 software allows you to format, structure, and edit documents at any time and gives you complete control over the design. WordPerfect 10 software includes Quattro Pro® and Corel Presentations . It also includes CorelCENTRAL software, which has Day Planner, Calendar, Address Book, Mail, Card File, Memos, Alarms and Admin.

Support:

web site <http://www.corel.com>

telephone 613-274-0500

CyberLink PowerDVD®

CyberLink Corp.

CyberLink PowerDVD software offers high-quality playback of DVD movies on your computer. Cyberlink PowerDVD software includes all the controls you expect from a home DVD player, plus a range of additional features. For example, you can bookmark scenes to come back to them later. The customizable controls, advanced navigation bar, and dynamic player skins combine to deliver a premium viewing experience.

Support:

web site http://www.gocyberlink.com/english/cs/support/index_tech.jsp

Drag'n Drop CD

DigiOn, Inc., and Easy Systems Japan Ltd.

Drag'n Drop CD software is designed to make CD creation simple. You can create your own audio or data CDs that can be read in most audio CD players or personal computers. With Drag'n Drop CD software, you can also back up CDs.

Support:

web site <http://www.ddcd.jp/dd3e/sony/cd>

Drag'n Drop CD+DVD

DigiOn, Inc., and Easy Systems Japan Ltd.

Drag'n Drop CD+DVD software is designed to make CD and DVD creation simple. You can create you own audio or data CDs and data DVDs. These discs can be read in most audio CD players or personal computers. With Drag'n Drop CD+DVD software, you can also back up CDs.

Support:

web site <http://www.ddcd.jp/dd3e/sony/cd>

DVgate

Sony Electronics Inc.

Connect a compatible digital video camera to your computer's i.LINK® port and capture 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.

Support: Sony Electronics, see VAIO Support Agent

DVgate Plus

Sony Electronics Inc.

Connect a compatible digital video camera to your computer's i.LINK® port and capture video clips and still images. Edit clips from your video, add new clips, and combine clips into new movie segments. Save your movies back to your digital video camera or in a variety of popular file formats.

Support: Sony Electronics, see VAIO Support Agent

EarthLink TotalAccess® (DSL or Dial-Up)

EarthLink, Inc.

EarthLink, one of the world's largest Internet Service Providers, offers dial-up and broadband access to the Internet. Member benefits include e-mail, newsgroups, an EarthLink Personal Start PageSM, free storage space for your personal Web site, a member magazine, and 24-hour technical support.

Support:

web site <http://support.earthlink.net>

EverQuest®

Sony Online Entertainment Inc.

This introductory edition of the EverQuest game, a 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. Rated TEEN by the ESRB: Content may be suitable for persons ages 13 and older. May contain violent content, mild or strong language, and/or suggestive themes.

Support:

web site <http://www.everquest.com>

telephone 858-537-0898

e-mail eqtech@soe.sony.com

hours M - F, 9 AM - 6 PM PST

Giga Pocket® Personal Video Recorder

Sony Electronics Inc.

Giga Pocket® Personal Video Recorder is a unique set of hardware and software components that provide you with excellent TV viewing, recording, and playback experiences. You can watch and record your favorite TV programs from your computer, create custom playlists, and play your Video Capsules on other compatible computers. Giga Pocket® Personal Video Recorder enables your computer, TV, VCR, and other video player devices to work in harmony.

Support: Sony Electronics, see VAIO Support Agent

ImageStation®

Sony Electronics, Inc.

With ImageStation® online service, you can store, organize, and share your photos and video clips online. ImageStation online service membership is free (except for transactions) and includes unlimited storage of digital photos, storage for 15 minutes of video clips, tools to personalize the design and arrangement of your pictures in albums, and access to stories and tips about image handling in ImageStation Magazine.

Support: Sony Electronics, see VAIO Support Agent

Microsoft® Age of Empires® II

Microsoft Corp.

The Age of Empires game is the sequel to the award-winning, best-selling realtime strategy game Age of Empires. The Age of Empires II game spans a thousand years, from the fall of Rome through the Middle Ages in which players lead one of 13 civilizations into greatness. The game keeps the epic scope of the original product's game play while evolving the combat and economic features. Rated TEEN by the ESRB: Content may be suitable for persons ages 13 and older. May contain violent content, mild or strong language, and/or suggestive themes.

Support: See Microsoft® Works

Microsoft® Encarta® Online

Microsoft Corp.

The Encarta Online encyclopedia includes more than 47,000 encyclopedia articles, many with multimedia features such as video and audio clips. You'll also find links to trusted Web sites with even more information. An interactive world atlas lets you zoom in on a particular region or country. Content may be suitable for persons ages 6 and older. May contain minimal violence and some comic mischief or crude language.

Support: See Microsoft® Works

Microsoft® Family Game Pack

Microsoft Corp.

Play classic games like chess and checkers with Bicycle Board Games (rated E). Own and run your own zoo in Zoo Tycoon (rated E). Play golf on the finest courses in Links (rated E). Rated E for EVERYONE by the ESRB: Content may be suitable for persons ages 6 and older. May contain minimal violence and some comic mischief or crude language.

Support: See Microsoft® Works

Microsoft® Internet Explorer

Microsoft Corp.

Internet Explorer offers dramatic performance, reliability, and usability improvements making it the fastest, easiest and most cost-effective Web browser for people to use, manage and support. Whether you use the Web to read e-mail, news or sports reports, shop online, listen to music or play videos, or share your images and photos with friends family or work colleagues, IE 6 makes it easy, exciting and fun.

Support: See Microsoft® Works

Microsoft® MSN®

Microsoft Corp.

MSN Internet service combines fast, reliable service with innovative Microsoft software to make the Web more useful for you and your family. The new MSN 8 Internet service includes smart features such as automatic e-mail virus protection services, an intelligent junk mail filter, powerful parental controls, and easy switching tools.

Support: See Microsoft® Works

Microsoft® Money Standard

Microsoft Corp.

Microsoft Money Standard provides a quick and easy way to organize and manage your personal finances. New features include auto-balancing, a bills estimator, spending comparison reports, and investment reminders. Save time organizing and managing your cash flow and balancing your checkbook. Create and track a budget, pay your bills, organize your finances, and view a complete picture of your financial health all in one place.

Support: See Microsoft® Works

Windows® Movie Maker 2

Microsoft Corp.

Windows Movie Maker 2 makes home movies amazingly fun. With Movie Maker 2 you can create, edit and share your home movies right on your PC. Build your movie with a few simple drag-and-drops. Delete bad shots and include only the best scenes. Add special effects, music and narration. Then share your movie via the Web, e-mail, on your PC, CD, or even DVD. You can also save your edited movie back to the DV tape in your camera to play on a TV or even on the camera itself.

Support: See Microsoft® Works

Microsoft® Office XP Professional

Microsoft Corp.

Microsoft Office XP Professional software redefines the relationship between people and software by providing a smarter, simpler way of working. New Office XP Professional 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. The Office XP Professional suite includes Word, Excel, Outlook®, PowerPoint®, and Access software.

Support: Sony Electronics, see VAIO Support Agent

Microsoft® Office XP Small Business Edition

Microsoft Corp.

Microsoft Office XP Small Business Edition helps 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. The Office XP Small Business Edition suite includes Word, Excel, Outlook®, and Publisher software.

Support: Sony Electronics, see VAIO Support Agent

Microsoft® Simulation Game Pack

Microsoft Corp.

Fly your own aircraft in Flight Simulator (rated E). Drive like a maniac in Midtown Madness 2 (rated E). Live in a world of mythology with Age of Mythology (rated T). Rated E for EVERYONE: Content may be suitable for persons ages 6 and older. May contain minimal violence and some comic mischief or crude language. Rated T for TEEN: Content may be suitable for persons ages 13 and older. May contain violent content, mild or strong language, and/or suggestive themes.

Support: See Microsoft® Works

Microsoft® Windows Media® Player

Microsoft Corp.

Using one of the premiere video and music playback software programs, you can better enjoy listening and watching many different kinds of media. Other great features include, instant-on playback, Mini-player mode, Intelligent Streaming technology, 5.1-channel surround sound audio codec, and built-in Smart Jukebox features.

Support: See Microsoft® Works

Microsoft® Works

Microsoft Corp.

Works lets you quickly and easily create high-quality, fun documents. Works provides the core tools you need to create documents, manage lists and schedules, create reports and budgets and organize information from many sources. Works includes Word Processor, Works Database, Works Spreadsheet, Works Portfolio, and Works Calendar.

Support:

web site <http://www.support.microsoft.com>

MoodLogic

MoodLogic, Inc.

MoodLogic is the world's largest descriptive database of song information. The information is provided from music lovers like you. MoodLogic allows you to browse the songs by artist and genre, narrow your selections by tempo or year, save your favorite playlist and transfer it to a portable player.

Support:

web site <http://www.moodlogic.com/support>

e-mail help@moodlogic.com

Network Smart Capture

Sony Electronics Inc.

Network Smart Capture captures images and video from any Sony® Digital Camcorder that supports a standard i.LINK® connection. Send your video or still images through e-mail or upload them to the ImageStation® service. You can use the Web camera function to automatically upload your captured images.

Support: Sony Electronics, see VAIO Support Agent

Norton Internet Security

Symantec Corporation

Symantec's Norton Internet Security software provides essential protection from viruses, hackers, and privacy threats. This easy-to-use, integrated suite includes full versions of Norton AntiVirus® and Norton Personal Firewall software to defend your PC against the most common Internet dangers. Norton Internet Security also includes Norton Spam Alert, which helps you detect and filter unwanted e-mail. Norton Parental Control keeps your children safe by letting you block objectionable Web sites and set up separate Internet access privileges for each member of your household. Automatic downloads keep Norton Internet Security software updated against new security threats. This is a trial version of the Norton Internet Security software.

Support:

web site <http://www.symantec.com/techsupp>

PC-cillin®

Trend Micro, Inc.

PC-cillin antivirus software provides complete, easy-to-use, Internet-era virus protection at your computer's entry points (including beaming, synchronization, and Internet access) to defend against potential threats hidden inside files, e-mail, or on the Web. (Subscription required after initial evaluation period.)

Support:

web site <http://www.trendmicro.com/en/support>

telephone 800-864-6027

e-mail pc-cillin@support.trendmicro.com

hours M - F, 5 AM - 5 PM (PST)

PictureGear Studio still image management software displays still images from your hard drive or a Sony digital still camera. The still images appear in a convenient light-table format so that you can easily view the contents of an entire folder, create your own photo albums and make prints.

Support: Sony Electronics, see VAIO Support Agent

PowerDVD
CyberLink Corp.

PowerDVD software offers high-quality playback of DVD movies on your computer. PowerDVD software includes all the controls you expect from a home DVD player, plus a range of additional features. For example, you can bookmark scenes to come back to them later. The customizable controls, advanced navigation bar, and dynamic player skins combine to deliver a premium viewing experience.

Quicken® New User Edition
Intuit Inc.

Quicken software is a fast, easy 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. (Users of earlier versions of Quicken software must upgrade for a fee.) Upgrade possible to Quicken® Deluxe, and other versions.

Support:

web site <http://www.intuit.com/support>

QuickTime®
Apple Computer, Inc.

The versatile QuickTime software plays many different kinds of media 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.

Support:

web site <http://www.info.apple.com>

telephone 800-275-2273

RealOne Player
RealNetworks, Inc.

RealOne Player is an all-in-one digital media player that lets you find everything and play anything. RealOne Player fuses a streaming media player, jukebox, browser and new content discovery services all in one application. Play CDs, MP3s and internet radio stations from anywhere in the world. View video clips and movies with the same player. Download music directly to your Sony MiniDisc Walkman® player or your Sony Memory Stick Walkman® player.

Support:

web site(s) <http://service.real.com/rjoptions.html>

telephone 206-674-2680

RecordNow
Easy Systems LTD, Japan

RecordNow is the ideal CD and DVD disc-mastering software. The RecordNow wizard makes it easy for the novice user to start recording right away.

Support:

web site <http://www.easy.co.jp/jrn45/sony>

The SonicStage jukebox application gives you all the tools you need to manage music on your computer. SonicStage software sports high-quality digital audio storage, a music visualizer, a sleek player skin design, audio CD burning capability (on computer models that include a CD recording device), and a parametric equalizer for fine-tuning audio playback.

Support: Sony Electronics, see VAIO Support Agent

SonicStage Mastering Studio

Sony Electronics Inc.

Use SonicStage Mastering Studio software to record songs from analog records or cassette tapes into your computer, and output them to CD-R or CD-RW discs, or audio files in WAV format.

Support: Sony Electronics, see VAIO Support Agent

Sony on Yahoo!

Yahoo! Inc.

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

Support:

web site <http://help.yahoo.com>

Screenblast® ACID®

Sony Pictures Digital Entertainment

Use the amazing Screenblast® ACID® software to produce, arrange, and edit your loop-based music. With ACID software, you can slice out long hours from the music-making equation and unlock the doors of your creativity by picking, painting, and playing your songs.

Support:

web site <http://www.sonicfoundry.com/support/default.asp>

Screenblast® ACID® Deluxe

Sonic Foundry, Inc. and Sony Pictures Digital Entertainment

Screenblast® ACID® Deluxe software lets you produce, arrange, and edit your loop-based music. With Screenblast ACID Deluxe software you get unlimited tracks, track-at-once burning, higher bit rates, and express effects like reverb.

Support:

web site <http://www.sonicfoundry.com/support/default.asp>

Screenblast® Sound Forge®

Sonic Foundry, Inc. and Sony Pictures Digital Entertainment

Sony Screenblast® Sound Forge® software enables you to record, edit, and process mono or stereo audio files for your multimedia or Internet projects. Whether you want to use a number of professional effects, convert video into streaming media, or synchronize audio to video—this software has everything you need to create rich, immersive multimedia and Internet content.

Support:

web site <http://www.sonicfoundry.com>

Sony® VAIO® Product Registration

Sony Electronics Inc.

VAIO Product Registration is an integrated registration application for both Sony Electronics and Microsoft Corporation. By registering with Sony, you enable Sony to notify you of software and hardware issues that may affect your user experience. Microsoft directs the data to Sony Electronics. Sony uses the registration data for warranty and product support purposes and the analysis of customer feedback on Sony computer features.

Support: Sony Electronics, see VAIO Support Agent

Sound Blaster® Audigy

Creative Labs, Inc.

Easily create, customize, and listen to MP3/WMA files, set up properties for audio devices, and record sound or music from various sources. Enjoy cinema-quality sound immediately and experience fully enhanced digital or analog sound.

Support

web site <http://www.americas.creative.com/support/custsup.asp>

Station.com

Sony Online Entertainment Inc.

Sony Online's award-winning Web site offers gamers the best in casual online games. With popular TV titles such as Jeopardy! Wheel of Fortune Online, card games, and action titles like Cosmic Rift, the station rewards its players with a host of contests and cash giveaways as well as localization so players can play in French, German and Japanese.

Support: Sony Electronics, see VAIO Support Agent

TurboTax® for the Web

Intuit, Inc.

Quickly and easily prepares and files tax returns without downloading or installing any software. From the easy-to-use interview to features such as Instant Data Entry, also found in the TurboTax desktop products, TurboTax for the Web offers easy, fast and customized tax preparation.

Support:

web site <http://www.intuit.com/support>

telephone 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.

VAIO Action Setup

Sony Electronics Inc.

VAIO Action Setup manages the settings for your computer's shortcut keys.

Support: Sony Electronics, see VAIO Support Agent

VAIO Edit Components

Sony Electronics Inc.

VAIO Edit Components is a software plug-in for Adobe® Premiere® software that provides maximum compatibility and video quality for capturing video from your Sony digital camcorder.

Support: Sony Electronics, see VAIO Support Agent

VAIO Hints and Tips

Sony Electronics Inc.

VAIO Hints and Tips provides helpful information about using your computer's preinstalled hardware and software. You can find suggestions on improving system performance, answers to frequently asked questions, and creative ways to tap into your computer's multimedia capabilities. As you become familiar with your computer's features, your creative VAIO® computer experience expands.

Support: Sony Electronics, see VAIO Support Agent

VAIO Media

Sony Electronics Inc.

VAIO Media software brings multimedia to your network, enabling you to share music, video, and still image files between your VAIO® computers. You can set up one or more computers as "media servers," which store your multimedia files **Page 276**

make them available to other VAIO computers on your wired or wireless network.

Support: Sony Electronics, see VAIO Support Agent

VAIO Music Services

Sony Electronics Inc.

Download music from the web, create your own albums, or have CDs sent straight to your house with VAIO Music Services. The ultimate place on the Web for music lovers to find out information about their favorite artist and get all of the latest music news.

Support: Sony Electronics, see VAIO Support Agent

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.

Support:

web site <http://www.sony.com/pcsupport>

telephone 888-4-SONY-PC (888-476-6972)¹

hours 7 days a week, 24 hours a day

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

WinDVD® for VAIO®

InterVideo, Inc.

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

Support:

web site <http://www.intervideo.com/jsp/Support.jsp>

telephone 510-651-0888