Dolby Digital & Dolby Theater System

Your computer supports Dolby Digital & Dolby Theater System through a SPDIF connector, located on the left side of the docking station. You must have a 3.5 mm (mono)- to RCA cable to use this port.

Volume Control

Using the Keyboard

Changing the volume with your keyboard.

Use [Fn] + [F7] to decrease the volume or [Fn] + [F8] to increase the volume.

Using the Volume Control Icon

Double-Click icon in the active program tray. The **Volume Control** window pops up. Use this window to adjust the volume. You can pop up a simple volume slider by a single click icon.

IEEE 1394 Connections

There are two 1394 connections on your system. There is a 6 pin connection on the left side of the Notebook and a 4 pin connection on the back of the docking station.

The IEEE 1394 is a very fast external bus standard that supports data transfer rates of up to 400 Mbps (400 million bits per second). A single 1394 port can be used to connect up to 63 external devices. In addition to its high speed, 1394 also supports *isochronous data* -- delivering data at a guaranteed rate. This makes it ideal for devices that need to transfer high levels of data in real-time, such as video devices. Like USB, 1394 supports both Plug-and-Play and hot plugging, and the six pin also provides power to peripheral devices.

Movie Maker

You can edit audio and video data using this Movie Maker that is included with Windows XP. It is also possible to make a slide show with each frame or picture.

To start the program:

Click **Start** > **All Programs** > **Accessories** > **Windows Movie Maker**.

Please refer to the on-line help manual to operate the Windows Movie Maker.

Using the Battery

Your computer uses a smart rechargeable Lithium-ion (Li-ion) battery pack for power when the AC adapter is not attached to an electrical outlet. The smart battery gives a accurate measurement of the current battery capacity which helps extend operating time by enabling effective power management in operating systems that take advantage of the accurate information supplied by the battery.

Charging the Battery

Your computer's battery starts charging automatically when you connect the power to the computer and to an electrical outlet. If the computer is off, the battery charges faster than if the computer's power is on.

Approximate charging times for the Li-Ion battery are:

- 1.5 hours with the computer off (Standard battery) and 2.5 hours (Long Life battery).
- 4 hours with the computer on (Standard battery) and 5 hours (Long Life battery).

While the battery is charging normally, the battery Status LED on the computer is amber (See "Reading the System Status LEDs" on page 27 for the location of the battery Status LED). When the battery is fully charged, the LED changes to green.

When you use a new battery pack for the first time or use a battery after a long period of storage, the initial battery life is shorter than normal. Normal battery life resumes after a few discharge-recharge cycles.

Follow these rules for charging your battery:

- A battery normally discharges power when not used for long periods of time. Be sure to recharge the battery every two months when it is not in use.
- Make it a practice to discharge your battery fully before recharging the battery. This can help extend the life of the battery.
- Do not attempt to charge the battery in temperatures of under 10^oC or over 32^oC.
- If you will not be using the computer for a long period of time (a month or more), you should completely charge the battery. After you have done so, remove the battery from the unit.

All batteries eventually wear out and lose the ability to hold a charge. You may need to replace your battery pack after a year of average usage.

All batteries lose their charge if they sit unused for an extended time period. When not used, battery can discharge fully in 2 to 3 months.

Increasing Battery Life

If you plan to use your notebook computer without the docking station, increase battery life using the following methods.

General Environment

Using the methods below you can increase battery life by as much as 1.5 times.

- Detach the docking station.
- Detach any unnecessary USB and PS/2 devices - (camera, mouse, keyboard etc.)
- Do not use any Multimedia programs - (Windows Media Player, audio/video CDs) unless absolutely necessary.

Adjust LCD Brightness

Reducing the LCD display brightness will reduce the power consumption of the battery.

To reduce the LCD display brightness use the [Fn] + [F10] key combination.

Power Management

The power options panel enables you to reduce the time until your computer goes into standby mode for example. See "Using Power Management Options" on page 53 for instructions on how to use this battery saving tool.

To change the time until your computer goes into reduced power modes, use the system power management function.

1. Click **Start** > **Control Panel** > **Performance and Maintenance**.
2. Click **Power Options**.

Battery Calibration

Calibrating your battery once a month is one of the recommended methods of increasing your computer's battery life. To calibrate the battery complete the following steps:

Calibration Notes:
You should start the battery calibration process with a fully charged battery, battery status LED is green. The power meter may not show 100%.

Before you commence the battery calibration process you should fully charge, then fully discharge and finally fully recharge the battery again.

1. Disconnect the AC power adapter after turning off the system.
2. Restart your computer and press [F2 Sys Rq] to enter BIOS setup.
3. Using the arrow keys, highlight **Run Battery Learning** in the **Power** menu.
4. Press [Enter] to start calibration process. The calibration usually takes 2 to 3 hours depending on the current battery charge.
5. When the calibration process is complete, recharge the battery fully.

Safely Using the Battery

Follow these guidelines to safely use the battery:

- Turn off your computer and unplug it if you accidentally:

    – Expose the equipment to liquid.

    – Drop, jar, or damage the computer.

- Use only approved battery chargers.
- Do not disassemble the battery, heat it above 100°C, or burn it. The battery used in this computer may cause a fire or chemical burn if mistreated.
- Your computer's rechargeable battery may be considered hazardous waste.

**If you replace your battery with a new one:**

- Keep the old battery out of the reach of children.
- Dispose of the old battery promptly.
- Make sure that you follow all local requirements when you dispose of the old battery.

Removing the Battery

Your computer comes with the battery pack inserted in the computer.

To remove the battery from the computer:

1. Turn the computer's power off and close the LCD display panel.
2. Undock the computer if docked. See "Docking/Undocking your Computer" on page 8.
3. Turn the computer over so that the bottom of the unit is facing up.
4. Slide the locking battery latch to the unlock position.

Locking Battery Latch
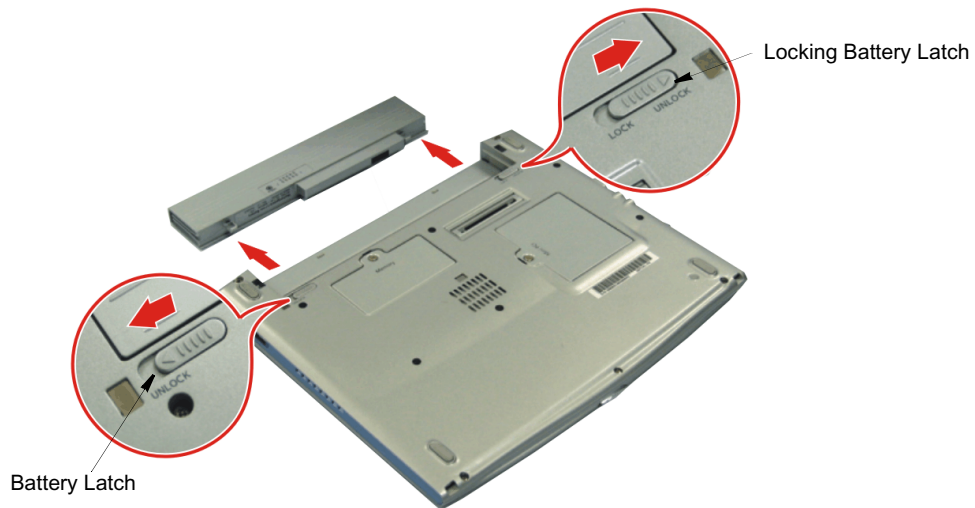
Battery Latch

5. Slide and hold the remaining battery latch outward and slide the battery out of the compartment.

Installing the Battery

To install the battery pack, follow the steps below:

> Insert the battery into the battery compartment. Ensure the correct orientation so that the battery fits in its slot properly.

1. With the computer's power off, close the LCD panel and turn the computer over so the bottom of the unit faces up.
2. Slide the battery into the battery pack into the compartment. Ensure the battery is fully inserted into the compartment.

3. Slide the battery pack latches toward the center of the computer. Make sure the locking battery latch is in the lock position.

Long Life Battery

1 or 2

Locking Battery Latch

Standard Battery
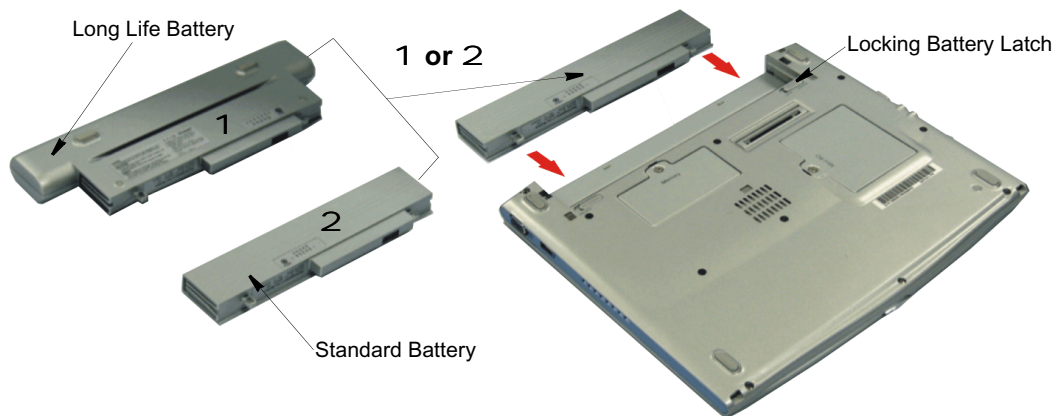
Monitoring the Battery Charge

Battery life is affected by factors such as the power-management settings in System Setup, the applications you use, and the brightness settings of the LCD. Under normal usage, the battery charge lasts approximately 3 hours for standard battery (undocked), 1 1/2 hours on standard battery (docked) and approximately 5 hours for the long life battery (undocked).

> Battery life estimates are subject to variation. The actual life of your battery may be less than the estimates given in the manual.

Power Management

To change the time until your computer goes into reduced power modes, use the system power management function.

1. Click **Start** > **Control Panel** > **Performance and Maintenance**.

2. Click **Power Options**.

Power Meter

The Power Meter displays the charge of the batteries and the current source of computer power, AC or batteries. You may monitor the battery charge or usage by using the "Power Meter". To access the power meter click [icon] icon on the task bar or click **Start** > **Control Panel > Performance and Maintenance > Power Options** > **Power Meter** tab.
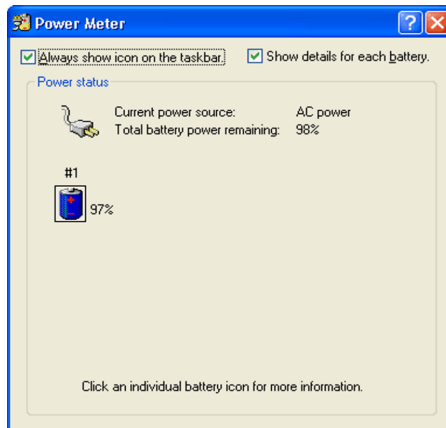
The Power Status icons shown below are displayed during Battery Charging Operations

At ~15% and 10% remaining battery power the current power source and the battery Icons respectively change to the icon shown below and you should follow the instructions in "Battery Warnings" section below

You may also check battery charge by moving the cursor to the [icon] icon, a small dialog box will display the % of charge.

Battery Warnings

If the battery charge is low (about 10%) you have approximately 5–10 minutes of battery life left. You should:

- Save your work and,
- Connect the power cord to the computer or turn off the computer and install a fully charged battery.

You can adjust the battery alarm features by using the operating systems power management program (**Start** > **Control Panel** > **Power Options** in Windows).

If you cannot run your computer from the battery and the battery will not charge when you attach the power cord, **the problem may be that:**

- The battery temperature is below 10°C or over 32°C. If you think the battery temperature is too hot or too cold, turn off the computer, remove the battery, and let the battery reach room temperature. Then try charging the battery again.
- The battery is defective. Replace the battery with a new battery.

Using System Setup

The System Setup program enables you to configure your computer hardware and set security and power-savings options. The settings you choose are stored in battery-maintained CMOS memory that saves the information even when the computer's power is turned off. When your computer is turned back on, it is configured with the values found in this memory.

Run System Setup if you get a message prompting you to run the program. You may also want to run System Setup, particularly the first time you use your computer, to set the time and date, use security or power-management features, or alter the settings of other features.

Your computer's version of System Setup may not include all the fields listed here or may include additional fields. Field names and order of appearance can vary according to the version of the BIOS (basic input/output system) on your computer.
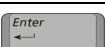
Starting System Setup

To start System Setup, turn on your computer and then press [F2 Sys Rq] and hold until the System Setup screen appears.

Table 5. System Setup Menus

Menu	Function
Main	Changes the basic system .
Advanced	Configures advanced features on your computer.
Security	Enables security features, including passwords and backup and virus-check reminders.
Power	Configures power-management features.
Boot	Specifies the order of boot devices and configures boot features.
Exit	Specifies how to exit System Setup.

To open the menu you need to use, use the left or right arrow keys to select the menu name.

Table 6. System Setup Navigation Keys

Navigation Key	Function
F1 / Prt Sc	Displays the General Help window.
Esc	Exits the current menu.
◄ or ►	Selects different menus. Pressing the **ESC** key at the Main menu brings you to the Exit menu.
PgUp ▲ or PgDn ▼	Moves the cursor up and down between fields.
Tab	Moves the cursor forward through the cells for a highlighted field. If the field has only one cell, the **Tab** key moves the cursor down to the next field.
- / F5 CRT/LCD	Scrolls backwards through the options for the highlighted field.
+ / F6 Mute	Scrolls forward through the options for the highlighted field.
F9 Rest	Sets the parameters for the current menu to their default values.
F10 ☼▼	Sets the parameters for the current menu to their previous values.
Enter	Executes commands or opens a submenu.

Changing Booting Priority

The Boot menu in System Setup enables you to select the booting device and to set booting options.

Boot Device Priority field enables:

You to select the order in which the computer attempts to boot from different devices. The field has three (3) options: Removable Devices, CD-ROM/DVD Drive, and Hard Drive.

To change the booting device priority, choose the device positions by completing the following:

1. At startup, press **<F2>** to open **System Setup**.

2. Use ▶ to select the **Boot** menu.

3. Highlight the option with **PgUp** or **PgDn** keys.

4. Use **<Minus>** until the option moves down in the list to the desired position **or** **<Shift + Plus>** keys until the option moves up in the list to the desired position.

5. Press **<Esc>** to return to the Exit menu.

6. Press **Enter** or **<F10>** to exit and save your changes.

7. Press **Enter** again to restart the computer.

> If you want to start the system using a bootable CD, change the CD-ROM Drive to be the first priority and make sure that Auto is set in the Type field of the Secondary Master Submenu at Main page.