

# Notice

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# Important Safety Instruction

Read all of these instructions, and save these instructions for later use.

- Follow all warnings and instructions marked on the product.
- Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
- Do not use this product near water. Never spill liquid of any kind on the product.
- Do not place this product on an unstable cart, stand, or table.
- Slots and openings in the cabinet are provided for ventilation. To ensure reliable operation of the product on a bed, sofa, rug, or other similar surface. This product should never be placed near or over a radiator or heat register. This product should not be placed in a built-in installation unless proper ventilation is provided.
- Before connecting this product to a power source, check the required voltage and frequency match the available power source.
- This computer is powered by an internal battery pack or by an external AC power source, Which is supplied with the computer. Use of another battery pack or AC power source may present risk of fire or explosion. To disconnect the AC power cord and remove the battery packs.
- This product is equipped with a 2-wire type plug. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet.
- Do not allow anything to rest on the power cord.
- Do not place this product in a location where someone may trip over the cord.
- If an extension cord is used with this product, make sure that the total of the ampere ratings on the products plugged into the extension cord do not exceed the extension cord ampere rating. Also, make sure that the total of all products plugged into the wall outlet does not exceed 15 amperes.
- Never push objects of any kind into this product through the cabinet slots, as they may touch dangerous voltage points or short out parts; that could result in a risk of fire or electric shock.
- Except as explained elsewhere in this manual, do not attempt to service this product yourself.
- Handle battery with care. If dropped, they may damaged.
- Do not allow the battery to be exposed to direct sunlight for extended periods of time.

- Do not attempt to disassemble the battery. If the battery is disassembled and the electrodes are exposed to outside, the battery may generate heat and smoke by chemical reaction.
- Do not expose the battery to moisture or chemicals.
- Charge the battery only as described in this document.
- Do not short circuit the battery terminals as the resulting high currents can damage the battery.
- The battery should not be used to power other products.
- Do not dispose of a used battery in a fire or incinerator, as an explosion may result.
- The battery should be recycled.
- Do not subject the battery to temperature should not less than -20 degrees Centigrade or greater than 50 degrees Centigrade.
- Unplug this product from the wall outlet and refer problems to the service representative under the following conditions:
  - When the power cord or plug is damaged or frayed.
  - If liquid has been spilled into product.
  - If the product has been exposed to rain or water.
  - If the product does not operate normally when the operating instructions are followed, adjust only those controls that are covered by the operating instructions. Improper adjustment of other controls may result in damage.
  - If the product exhibits a distinct change in performance.

# Battery Disposal

Warning : Do not put rechargeable batteries or products powered by non-removable rechargeable batteries in the garbage.

Contact your customer service representative for information on how to dispose of batteries that you cannot use or recharge any longer.  
Follow all local regulations when old batteries.

# Federal Communications Commission (FCC)

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:(1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

## NOTE:

This equipment has been tested and found to comply with the limits for a Class B digital device pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generate uses and can radiate radio frequency energy and if not installed and used in accordance with the instructions may cause harmful interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions. The user may find the following booklet helpful: "Something About Interference." This is available at FCC local regional offices. Our company is not responsible for any radio or television interference caused by unauthorized modifications of this equipment or the substitution or attachment of connecting cables and equipment other than those specified by our company. The correction will be the responsibility of the user. Use only shielded data cables with this system.

# Canadian Radio Interference Regulations

This apparatus does not exceed the class B limits for radio noise emissions set out in the radio interference regulations of the Canadian Department of Communications.

Le présent appareil n'émet pas de bruits radioélectriques dépassant les limites applicable aux appareils de la classe B prescrites par le règlement de brouillage radioélectrique dicté par le Ministère des Communications du Canada.

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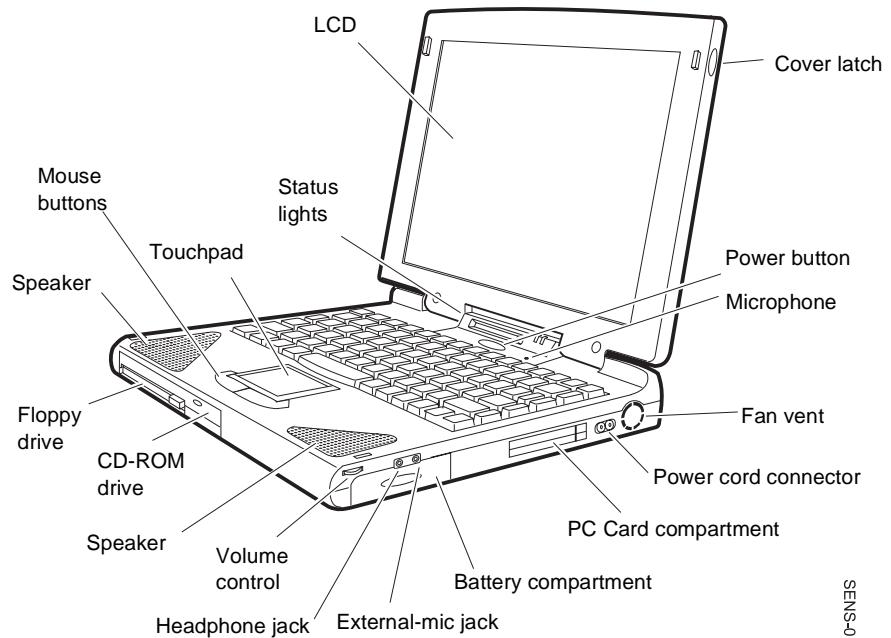
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# Introducing Your Computer

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Your computer is a lightweight portable computer that includes features to meet your computing needs at home or on the road.

Figures 1 through 3 show you the features of your computer.



*Figure 1. Front View of Computer*

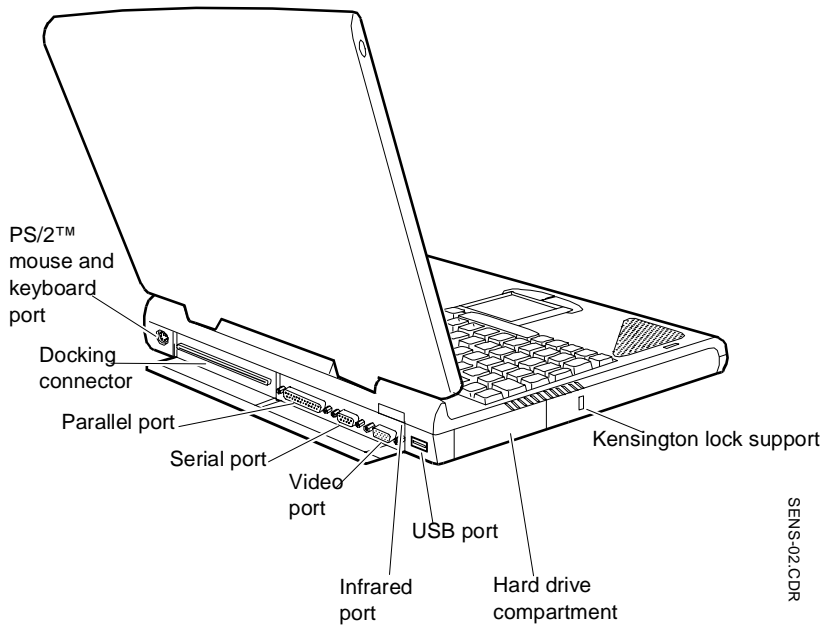


Figure 2. Back View of Computer

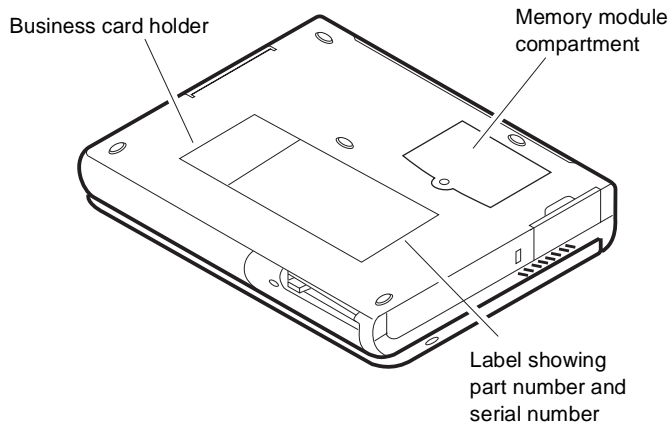


Figure 3. Bottom View of Computer

# Using Your Computer for the First Time

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This section gives you detailed information on using your computer for the first time.

## Installing the Battery

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Your computer comes with the battery pack separate from the computer. To install the battery pack:

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 compartment cover straight up and off the computer (Figure 4).
3. Slide the battery pack into the compartment. Make sure the battery is fully inserted into the compartment.
4. Align the tabs on the battery compartment cover with the slots on the battery compartment.
5. Push the cover straight down until it snaps into place.

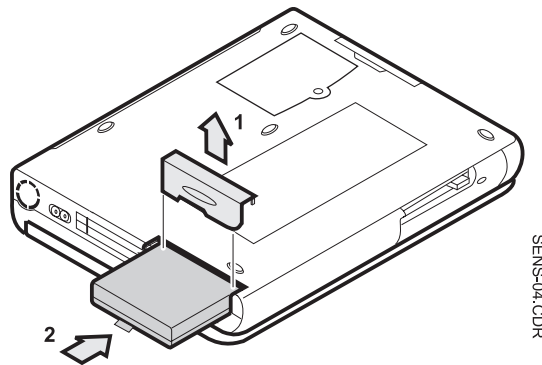


Figure 4. Installing the Battery

## Attaching the Power Cord

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Your computer includes an internal AC adapter that powers the computer and charges the battery when you plug in the power cord. The first time that you use your computer, fully charge the battery by attaching the power cord to the computer and to an electrical outlet.

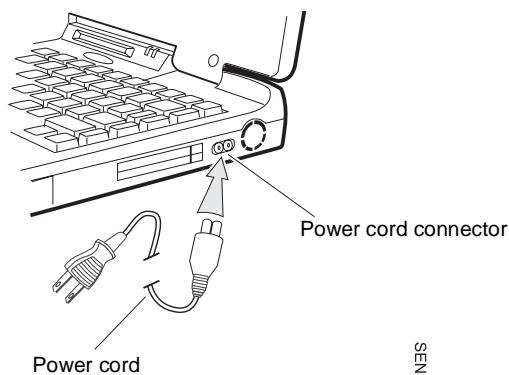


**All batteries lose their charge if they sit unused for an extended time period. When not used, battery can discharge fully in 2 to 3 months.**

**The battery may have discharged in the time it took for the computer to go from the factory to you.**

To attach the power cord:

1. Plug the cord into the power connector on the right side of the computer (Figure 5).
2. Plug the cord into an electrical outlet.



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*Figure 5. Connecting the Power Cord*

The battery starts charging as soon as you plug the power cord into an electrical outlet. The battery charges faster if the computer is turned off during charging.

If the battery is fully depleted and the computer is turned off, the battery charges in about 2 hours. If the computer is turned on, the battery charges in about 4 hours. When the battery is charging, the battery charge light is amber. When the battery is fully charged, the light turns green.

See "Using the Battery" for more information on using your computer's battery.

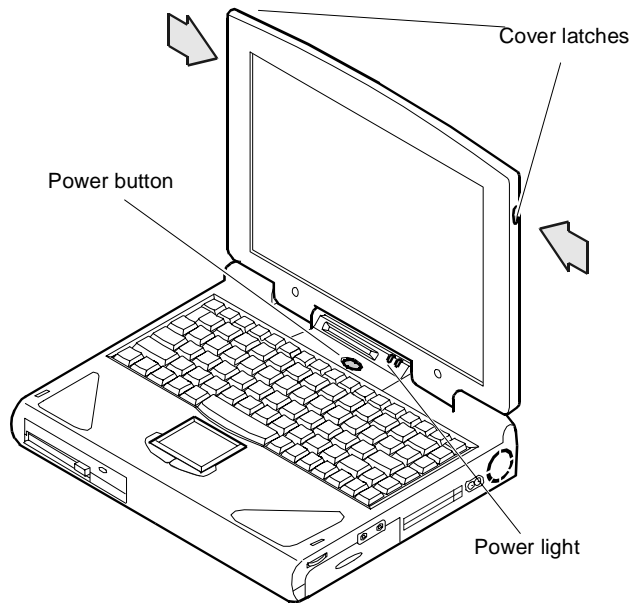
## Turning On the Computer

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To turn on the computer's power for the first time:

1. Press and hold the cover latches on the sides of the cover.
2. Lift up the cover.
3. Press and then release the power button (Figure 6).

The power light is on when the computer's power is on.



SENS-06.CDR

Figure 6. Turning On the Computer's Power

## Understanding POST

---

When you turn on your computer, a routine called POST (power-on self-test) automatically runs to test the computer components. Several messages appear on the screen during POST.

Screen messages are built into the computer to report both normal and abnormal system conditions. If an error message appears, take any action suggested in the message. If the message identifies the error condition but does not suggest any corrective action, write down the message and contact the manufacturer or an authorized reseller's service center for assistance.

After POST is completed, a message appears on screen telling you to press any key to continue. Press a key to finish the start-up procedure.

## Adjusting the LCD Display

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You may wish to adjust the LCD (liquid-crystal display) when you begin using your computer. A TFT (thin-film transistor) LCD does not require adjustment for contrast because the contrast is set to remain at maximum. You can adjust both the brightness and contrast on a DSTN (double layer super twist nematic) LCD.

To adjust the LCD:

- Press <Fn+Right Arrow> to increase the display brightness.
- Press <Fn+Left Arrow> to decrease the display brightness.
- Press <Fn+Up Arrow> to increase the display contrast.
- Press <Fn+Down Arrow> to decrease the display contrast.

## Making Backup Disks

---

Use the Create System Disks Utility in Windows 95 to make backup disks of any software on your hard drive. The utility will start automatically when you use your computer for the first time. You can also open the utility by doing the following:

1. Click the Start button on the taskbar.
2. Select *Programs*.
3. Select *Accessories*.

4. Select *System Tools*.
5. Click *Backup*.

## Turning Off Your Computer

---



**If your computer has a Windows operating system, turn off your computer by performing the shutdown procedure described in this section. Otherwise, you may lose data.**

To turn off the computer:

1. Click Start on the taskbar.
2. Click *Shut Down*.
3. Select the shut down option.
4. Click OK or Yes.
  - If the operating system is Windows 95, the computer turns off.
  - If the operating system is Windows NT, you receive a shutdown message and must press the power button to turn off the computer.

## Restarting Your Computer

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You may need to restart (reboot) your computer when installing hardware or software or if the computer does not respond to your input. A warm (or soft) boot prompts you to save your files, turns off the computer, and then restarts the computer. A cold boot turns off the computer without saving your files.

To perform a warm (or soft) boot:

1. Click Start on the taskbar.
2. Click *Shut Down*.
3. Select the restart option.
4. Click OK or Yes.
5. Save your files if prompted. Your computer reboots.





**Do not perform a cold boot unless your keyboard and touchpad have no effect and you cannot perform a warm boot.**

**When you perform a cold boot, you lose data unless it was saved to a storage medium.**

You can also perform a soft boot by saving your files and pressing <Ctrl+Alt+Del>. You can perform a cold(or hard) boot by pressing the power button to turn the computer off, waiting five second, and then pressing the power button to turn the computer on.

## Tips for Using Your Computer

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The following information helps you avoid potential problems as you use your computer:



**Do not try to disassemble your computer. Opening the system chassis voids your warranty. Only an authorized manufacturer's service center can replace or add any parts inside the chassis.**

- Follow all the instructions and cautions in your computer user documentation.
- The LCD has a polarized surface and can be damaged easily. To prevent damage, avoid touching the screen.
- Use only memory modules.
- Because a notebook computer is small and has restricted air flow around components, it is more likely to overheat than a desktop computer. A fan inside your computer runs when needed to help eliminate some heat. Make sure the fan vent on the right side of your computer and the air vent on the left side are not blocked when you use the computer. (See Figure 1 and Figure 2 for the location of the vents.) Occasionally check the vents and remove any accumulated dust on the outside.
- Avoid using or storing the computer in extremely hot or cold areas, such as a car on a hot day. Keep the computer away from heaters and out of direct sunlight. Exposure to excessive heat may damage computer components.

If you have left your computer in a hot place, let it cool down slowly to room temperature (with the LCD panel open) before using it.

- Do not remove the memory-module compartment door, or try to install a memory module when the computer is on. (See Figure 3 for the location of the door.)

(For information on installing memory modules, see “Memory Modules”.)

- Set up your computer work area to avoid physical strain. Sit with your back straight and supported by your chair. Adjust your chair or work table so that your arms and wrists can remain in a relaxed position, parallel with the floor. Avoid bending or twisting your wrists as you work. Your hands should “float” slightly above the keyboard. Refer to a book on office ergonomics for more information on setting up your work area.
- Take frequent breaks from working at the computer to rest your eyes and stretch your muscles.
- Remember to save your data files frequently and to make backup copies of your files.

## Traveling with Your Computer

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If you are traveling by airplane, follow these tips:

- Take the computer with you as carry-on luggage. Do not check the computer with your baggage.
- Allow the computer and disks to go through the X-ray security devices. Do not hand-carry disks through the walk-through metal detectors, which can cause loss of data.
- Make sure that the battery is charged or the power cord is easily accessible. You may be required to turn on the computer for airport security personnel.
- Be prepared to turn off the computer during take off and landing.

## Handling Spills

---

Do not spill anything on your computer. The best way to avoid spills is to avoid eating and drinking around your computer. If you do spill something on your computer, turn off your computer, unplug it immediately, and do the following:

- If you spill liquid on the keyboard, drain as much of the liquid from the keyboard as possible. Be careful not to let the liquid drip onto the LCD panel. Allow the system to dry for several days before trying to use it.
- If you spill liquid on an external keyboard or keypad, unplug it and drain as much of the liquid as possible. Allow the keyboard to sit at room temperature for a full day before trying to use it.



**Sweet liquids leave a sticky residue that may jam the keyboard despite your efforts to dry it.**

- If you spill liquid on the LCD panel, clean it immediately with a soft cloth and denatured alcohol. Do not use water, window cleaner, acetone, aromatic solvent, or dry, rough towels to clean it.



**Some liquids damage the polarized LCD screen. If your screen is damaged, contact your authorized manufacturer's service center for a replacement.**

## Storing the Computer for Long Periods

---

If possible, leave the power cord connected to the computer and an electrical outlet when the computer is not in use. This helps extend the life of the battery and keeps the battery fully charged.

If you will not be using the computer for a long period of time (a month or more), you should charge the battery until it is completely full. After you have done so, remove the battery from the unit.

# Using the Keyboard

Your computer has an 87/88-key keyboard (Figure 7). By pressing designated key combinations, you can have access to all the key functions of a full-sized keyboard.

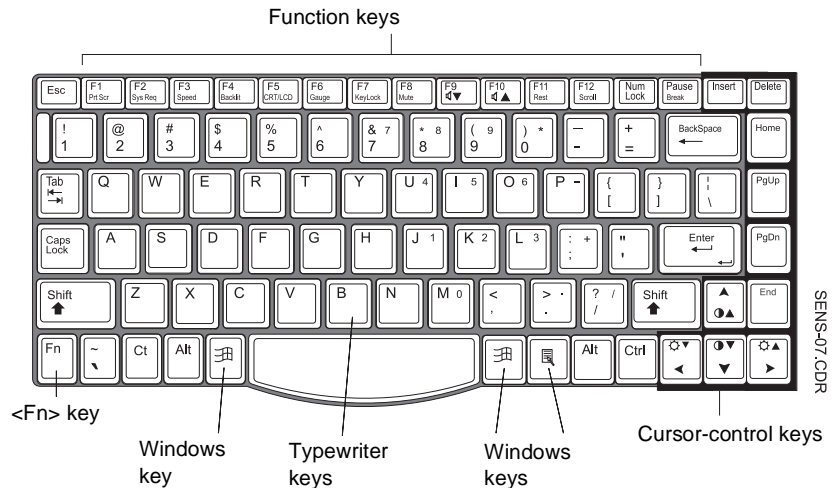


Figure 7. Keyboard



Although the layout of the keys on your computer's keyboard is different from that on a desktop computer's keyboard, the keyboard feels like a full-sized keyboard when you use it. The distance between the keys (the pitch) is the same as on a full-size keyboard (19 mm). The travel, or space the key goes down when pressed, is also the same (3 mm).

The keys on the keyboard can be grouped into the following categories:

- Full-sized typewriter keys are arranged like a standard typewriter keyboard and are used for text entry.
- Function keys, when pressed together with the <Fn> key, enable special functions.
- Cursor control keys move the cursor. They may perform other functions, depending on your software.
- Windows keys open Windows menus.

To clean the computer keyboard, use slightly damp cotton swabs. Scrub the keys and the surface around the keys.

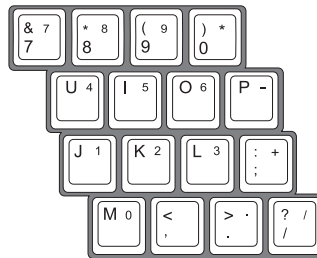


**Do not allow liquid to drip into the keyboard or you may damage the keyboard.**

## Using the Numeric Keypad

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Your keyboard includes a numeric keypad, which is a group of keys that you can set to type numbers and mathematical symbols, such as the plus sign (Figure 8). A number or symbol on the right corner of each keypad key shows its numeric function.



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*Figure 8. Numeric Keypad*

Press <Num Lock> to turn on the embedded numeric keypad. The numeric functions of the keypad are enabled and the Num Lock light turns on. (See Figure 10 for the location of the Num Lock light.)

While the numeric functions are enabled, you can temporarily return a key to its normal function by pressing <Fn> and the key. For example to type the letter *m*, press <Fn+m>.



To turn the numeric keypad off, press <Num Lock> again. The Num Lock light turns off.

## Using Special Function Keys

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The <Fn> key activates special functions when it is pressed in combination with another key. Table 1 shows the special key combinations.

Table 1. Description of Special Function Keys

<Fn> Key Combination	Function
<Fn+F1>	<i>Print screen</i> : Takes a picture of the open screen, which you can paste into the Paint program.
<Fn+F2>	<i>System request</i> : Reserved for use in software programs.
<Fn+F3>	<i>Speed</i> : Enables and disables the Power Saving mode. The options are Turbo and Non-turbo. Press <Fn+F3> to change the Power Saving mode to their next settings. Press <Fn+F3> again to return the Power Saving mode to their previous settings.  An icon of a dripping water faucet indicates that Power Saving mode is Non-turbo mode.   An icon of a water faucet with water running at full force indicates that Power Saving mode is Turbo mode. 
	This key combination changes Power Saving modes only until you turn your computer off and then back on again. The <Fn+F3> key combination functions only when the computer is run from the battery. (See "Power Menu" on page 53 for more information on power-management settings.)
<Fn+F4>	<i>Backlit</i> : Turns the LCD display off. Press any key (except the <Fn> key) to turn the LCD display back on.
<Fn+F5>	<i>CRT/LCD</i> : Switches the display between the LCD, the external monitor, and simultaneous display on both the LCD and the external monitor.

- <Fn+F6> *Gauge*: Displays the battery gauge in the upper-right corner of your screen. To change the Power Saving mode in System Setup, press <F1> while the gauge is displayed. An icon of a dripping water faucet indicates that Power Saving mode is Non-turbo mode. An icon of a water faucet with water running at full force indicates that Power Saving mode is Turbo mode. <F1> changes Power Saving mode only when the computer is run from the battery. The Power Saving mode you choose remains in force when you turn off the computer. The gauge closes in a few seconds, or you can press <Esc> to close the gauge. (See "Monitoring the Battery Charge" on page 33 for more information on the battery gauge.)
- <Fn+F7> *KeyLock*: Locks the keyboard and activates password protection. Type your password and press <Enter> to unlock the keyboard. The <Fn+F7> key combination has no effect unless a password is enabled in System Setup. The Num Lock, Caps Lock, and Scroll Lock lights blink when the keyboard is locked.
- <Fn+F8> *Mute*: Turns the audio output on and off.
- <Fn+F9> *Volume down*: Decreases the audio volume.
- <Fn+F10> *Volume up*: Increases the audio volume.
- <Fn+F11> *Rest*: Puts the computer into rest mode. To resume normal operation from rest, press the power button. (See "Using Power Management Options" on page 50 for more information about the rest mode.)
- <Fn+F12> *Scroll*: In some applications, sets the cursor-control keys to scroll the page up or down while the cursor position does not change. Pressing <Fn+F12> again turns off the scrolling function.
- <Fn+Up Arrow> *Contrast up*: Increases the LCD contrast. Contrast adjustment is not needed on a TFT LCD.
- <Fn+Down Arrow> *Contrast down*: Decreases the LCD contrast. Contrast adjustment is not needed on a TFT LCD.
- <Fn+Right Arrow> *Brightness up*: Increases the LCD brightness.
- <Fn+Left Arrow> *Brightness down*: Decreases the LCD brightness.



**When you press a function key combination, the system sound may be temporarily muted.**

# Specifications

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Table 11 gives the specifications for your computer.

*Table 11. System Specifications*

<b>Dimension</b>	
Width	11.9 in (30.8 cm)
Height	2.0 in (5.2 cm)
Depth	10.0 in (25.3 cm)
Weight (with NiMH battery & TFT LCD)	8.13 lb (3687 g)
LCD viewing area (12.1 DSTN)	9.6 x 7.2 in (245.0 x 183.7 mm)
LCD viewing area (12.1 TFT)	9.7 x 7.3 in (246.0 x 184.5 mm)
<b>Environment</b>	
Ambient temperature, operating	50 <sup>o</sup> –90 <sup>o</sup> F (10 <sup>o</sup> –32 <sup>o</sup> C)
Ambient temperature, storage	23 <sup>o</sup> –104 <sup>o</sup> F (-5 <sup>o</sup> –40 <sup>o</sup> C)
Relative humidity (noncondensing), operating	20–80%
Relative humidity (noncondensing), storage	5–90%
Altitude, operating	0 to 8,000 ft (0 to 2,348 m)
Altitude, storage	0 to 40,000 ft (0 to 12,192 m)
Shock, operating	10 G for 11 ms half sine
Shock, nonoperating	60 G for 11 ms half sine
<b>Nickel-Metal Hydride Battery</b>	
Weight	1.33 lb (607 g)
Nominal open circuit voltage	12.0 VCC
Capacity, typical	3500 mAh, 42whr
Charging time, approximate, with computer turned off	2 hr
Charging time, approximate, with computer turned on	4 hr
Average battery life, with no power management enabled	2 hr