



## Important information about your upgraded PowerBook

Your Macintosh PowerBook contains a new logic board, which provides enhanced performance.

### What has changed in your PowerBook

Your computer has been upgraded with a PowerBook Duo 2300 series logic board, which uses a PowerPC 603e microprocessor. The upgrade gives your computer PowerPC performance and lets you use standard Macintosh application programs and “native” applications that have been specially written for the PowerPC microprocessor. You will see significantly faster performance of your applications if you upgrade them to versions that are native for PowerPC.

#### Microprocessor specifications

- PowerPC 603e, clock speed 100 megahertz (MHz)
- System bus speed 33 megahertz (MHz)

#### Memory specifications

- 8 megabytes (MB) low-power dynamic random-access memory (DRAM)

*Note:* Any RAM you installed in your PowerBook before upgrading it is added to the 8 MB that came with the logic board upgrade.

- 4 MB PowerPC read-only memory (ROM)

## New power adapter

A new power adapter is provided with your upgraded PowerBook. This adapter has an output of DC 24 volts, 1.5 amperes, 36 watts. (The power adapter supplied with some earlier models has an output of 24 volts, 1.04 amperes, 24 watts.)

**IMPORTANT** Be sure to use the new power adapter with your computer. The older adapter may not work reliably with the upgraded system.

## System software version 7.5.2

Your Apple-authorized dealer has installed system software version 7.5.2 on your computer's hard disk. Depending on how long ago you purchased your PowerBook and whether you've already upgraded to System 7.5, you may find many new features in the system software.

Only the system software files on your computer's hard disk have been updated to system software version 7.5.2. No other files have been erased or changed during the upgrade procedure.

If you haven't been using System 7.5 already, be sure to read Chapter 2, "Getting Help," in the PowerBook 2300 series manual for an introduction to the on-screen help that is now part of your PowerBook's system software.

## What hasn't changed in your PowerBook

The following hardware components of your PowerBook have not changed:

- Display
- Internal hard disk
- Battery
- Trackball
- Keyboard
- Any expansion memory that was installed before the upgrade

*Note:* Some older RAM expansion cards contain 80 nanosecond (ns) memory chips, which may not work reliably with your upgraded computer. The RAM chips should be 70 ns or faster for reliable operation.

- Any internal modem that was installed before the upgrade

*Note:* If you have an internal Express modem, be sure to update the Apple Telecom software to version 2.3.2 (provided on floppy disks with your upgraded PowerBook).

If you have a modem from an independent supplier, contact the manufacturer to determine whether it requires updating (usually with revised software).

## **Docks and disk adapters**

Your computer is compatible with any dock or disk adapter you used previously, including the PowerBook Duo Dock Plus, PowerBook Duo MiniDock, and PowerBook Duo Floppy Disk Adapter.

Some features of docks that were designed to improve performance in PowerBook models with the 68030 microprocessor are turned off or have no effect when the dock is used with your upgraded computer. The newer technology of the PowerPC microprocessor provides comparable features.

## **Battery recharger**

Some older models of the PowerBook Duo battery recharger do not work with the newest batteries. The model that recharges all type of batteries for your computer is number M4178LL/B. If your recharger has a different number, contact an Apple-authorized service provider for assistance.

## **Tips for enhanced performance**

To take full advantage of your upgraded computer's capabilities, you may want to consider upgrading one or more other components of your system.

## **Type III battery**

PowerBook Duo 2300 series computers are designed to use Type III nickel-metal-hydride (NiMH) batteries. Although the older types of NiMH battery you used previously will power the computer, Type III batteries will provide longer periods of operation (2 to 4 hours, depending on battery-saving features used).

## RAM expansion

Expanding the memory in your PowerBook also will increase its overall performance, especially if you use multiple programs or a large-capacity RAM disk.

## Hard disk drive

System performance is generally improved with newer, higher-capacity hard disk drives. These drives have better access and throughput times than most of the hard disks provided in earlier PowerBook Duo models.

## Software operation

The system software was updated as part of the upgrade. Your old System Folder was renamed “Previous System Folder” and its contents were not erased or changed. You can try out the control panels, extensions, and other items from the old System Folder to determine whether they are compatible with the new system software. Simply add the components one at a time, restarting after you add an item. If the computer starts up and operates normally, the component is probably compatible. (You can also purchase software that checks all the items in your System Folder and reports which are incompatible.)

If the system software seems to behave unpredictably or an icon appears at several places on the desktop, try resetting the parameter RAM (PRAM) to eliminate the problem. You reset the PRAM by restarting the computer and pressing Option-⌘-P-R simultaneously as soon as you hear the startup sound. See Chapter 6, “Tips and Troubleshooting,” in the user’s manual for more information.