



Tech Info Library

Power Macintosh 9500 Series: Frequently Asked Questions (5/96)

Article Created: 28 June 1995

Article Reviewed/Updated: 20 May 1996

TOPIC -----

This article includes Frequently Asked Questions (FAQ) about the Power Macintosh 9500 Series computers.

Questions in this FAQ:

=====

- 1) If I add more memory to my system, what kind do I need?
- 2) Which DIMMs are supported?
- 3) How much benefit is gained from interleaving?
- 4) Does this Power Macintosh use the same self-terminating connectors as the original Power Macintosh?
- 5) Is the Power Switch a "hard switch"?
- 6) Can NuBus cards be used with these Power Macintosh computers?
- 7) Can these Power Macintosh computers accommodate any PCI card?
- 8) Are these computers PCI card plug-and-play?
- 9) Which version of Mac OS should be used with the Power Macintosh 9500/120 and 9500/132 computers?
- 10) How does "processor upgradeability" work?
- 11) My computer came with Open Transport 1.0, and my PPP software says I need version 1.0.7. How can I get version 1.0.7?
- 12) I started my Power Macintosh computer from the startup CD, but Disk First Aid says "files are open" and won't allow me to click on Repair. How can I close those files and repair the directory?
- 13) I have an old program that requires fewer than 256 colors, but in the Monitors control panel I cannot select anything lower than 256 colors.

- 14) As my computer starts up, my display flashes off and back on again. Why?
- 15) How can I obtain the built-in Ethernet address for my computer?
- 16) I have a GeoPort Telecom Adapter. What version of the Apple Telecom software should I be using?
- 17) What causes Type 11 errors?
- 18) 5) Question: I need to run DOS software on my Power Macintosh 9500 series computer. What are my options?

DISCUSSION -----

- 1) Question: If I add more memory to my system, what kind do I need?

Answer: You need Dual Inline Memory Modules (DIMMs) that are 64-bit-wide, 168-pin, fast-paged mode, 70 nanosecond RAM.

- 2) Question: Which DIMMs are supported?

Answer: The 4, 8, 16, 32, and 64 MB DIMMs are supported.

- 3) Question: How much benefit is gained from interleaving?

Answer: Interleaving provides maximum performance to you. If the DIMMs are not paired in the A and B slots, the system does not perform to its capability. Interleaving lets the computer read and write data to memory at the same time other reads and writes are occurring. This improves performance. DIMMs need to be the same size for interleaving to work.

- 4) Question: Does this Power Macintosh use the same self-terminating connectors as the original Power Macintosh?

Answer: Yes, the self-terminating connector is the same.

- 5) Question: Is the Power Switch a "hard switch"?

Answer: No. It is a "smart switch". You cannot turn off power by just pressing the power actuator button. If you press the Power Key, it quits all applications and shuts down the machine.

- 6) Question: Can NuBus cards be used with these Power Macintosh computers?

Answer: NuBus cards cannot be used in this Power Macintosh. However, to preserve your investment in NuBus technology, a NuBus expansion chassis for PCI will be available from Second Wave, Inc. This chassis will enable you to continue to use

your existing NuBus cards in Power Macintosh systems with PCI slots.

7) Question: Can these Power Macintosh computers accommodate any PCI card?

Answer: These systems support any PCI 2.0-compliant card. However, a Mac OS-specific software driver is required for each card, just as PCI drivers are required for any other operating system.

8) Question: Are these computers PCI card plug-and-play?

Answer: For the most part, yes. The PCI card needs to include either a Mac OS driver or a new ROM so the Mac OS can recognize it.

9) Question: Which version of Mac OS should be used with the Power Macintosh 9500/120 and 9500/132 computers?

Answer: The minimum system software these computers use is Mac OS version 7.5.2. However, we recommend using the System 7.5 Update 2.0 to upgrade to Mac OS version 7.5.3. The update is available online for download from the Apple Software Updates areas.

If you do not have access to an online service or the Internet, then you can order the update on CD-ROM or floppies in the U.S. for a \$13 shipping and handling fee. The number to call in the United States to order the update is 1-800-293-6617, ext. 984.

10) Question: How does "processor upgradeability" work?

Answer: Power Macintosh 9500 series computers are equipped with a removable processor card. This processor card can be replaced with a more powerful processor card.

Apple currently offers The Power Macintosh Processor Upgrade Card in two processor speeds: one with a 120-megahertz PowerPC 604 RISC processor, and the other with the even more powerful 132-megahertz PowerPC 604.

Power Macintosh 9500 series computers that are capable of accepting processor upgrade cards will be able to support cards of up to 200 MHz, as they become available.

11) Question: My computer came with Open Transport 1.0 and my PPP software says I need version 1.0.7. How can I get version 1.0.7?

Answer: We recommend updating to Open Transport 1.1 which is installed by the System 7.5 Update 2.0. See the answer to question 9 on how to obtain a copy of the update.

12) Question: I started my Power Macintosh computer from the startup CD, but Disk First Aid says "files are open" and won't allow me to click on Repair. How can I close those files and repair the directory?

Answer: Virtual memory is active when started from the Power Macintosh CD. Here are two ways to disable virtual memory:

- Insert the CD into the computer. Open the Startup Disk control panel and select the Power Macintosh CD. Restart the computer and hold down the Shift key. Release the Shift key when you see the Extensions Off message at the Welcome to Macintosh screen. Virtual memory is now off and Disk First Aid should be able to attempt repairs.

- Start the computer with the Power Macintosh CD in the drive and hold down the C key. When you see the happy Macintosh on the screen, immediately release the C key and hold down the Shift key. Release Shift when you see the Extensions Off message at the Welcome to Macintosh screen. Virtual memory is now off and Disk First Aid should be able to attempt repairs.

13) Question: I have an old program that requires fewer than 256 colors, but in the Monitors control panel I cannot select anything lower than 256 colors. What can I do?

Answer: The built-in video does not support fewer than 256 colors or grays. If you have a program that requires black and white, 4, or 16 colors to run, then you cannot run these programs. Check with the software vendor for availability of a compatible version. You could also check with video card vendors to see if any offer support for fewer than 256 colors.

14) Question: As my computer starts up, my display flashes off and back on again. Why?

Answer: The software video driver for the monitor is loading up. This is normal and is addressed in the Power Macintosh 7200/9500 Read Me file.

15) Question: How can I obtain the built-in Ethernet address for my computer?

Answer: With Mac OS 7.5.2, the Apple LAN Utility version 1.0b4e1 can obtain the built-in Ethernet address in the Power Macintosh 9500 series computers. While this utility is not supported by Apple, it is available on the online services.

The Tech Info Library article, "Power Macintosh 9500: Can't Get Ethernet Address", has additional steps to get the hardware address if you connect to a UNIX host.

We recommend updating to Mac OS 7.5.3 using the System 7.5 Update 2.0. With the update install you can then choose Get Info from under the File menu when in the AppleTalk and TCP/IP control panels to get the built-in Ethernet address.

16) Question: I have a GeoPort Telecom Adapter. What version of the Apple Telecom software should I be using?

Answer: You should use at least Apple Telecom 2.2. Apple Telecom 2.3 is the current version but adds no additional functionality to the Power Macintosh 9500. Note that currently you must have AppleTalk inactive or set to the Ethernet port for the GeoPort to work correctly. This will be addressed in a future update of the system software.

Note: Apple Telecom 2.2 or later will install the Audio Tuneup extension into the Extensions folder. This is not needed when the System 7.5 Update 2.0 is installed and the installer will remove it if present. If you install the Apple Telecom software after installing the update, then remove the Audio Tuneup file from the Extensions folder or reinstall the update.

17) Question: What causes Type 11 errors?

Answer: Type 11 errors are typically due to one of a variety of factors:

- Font problems: you are using a bad font.
- Incompatible software running in emulation.
- SCSI chain problems: bad driver or cable.
- Cache SIMM problems (if you have installed one on your Power Macintosh computer).
- RAM problems: bad RAM has been installed.

For steps on how to troubleshoot such problems, use the search string "type 11 power" to locate the Tech Info Library article, "Power Macintosh: Meaning of Error Type 11." Use the search string "sys7 extension troubleshoot" to locate the article "Troubleshooting Macintosh System 7 INIT Conflicts."

18) Question: I need to run DOS software on my Power Macintosh 9500 series computer. What are my options?

Answer: With a Power Macintosh 9500 series computer, there are several ways to accomplish this.

- Apple offers two PC Compatibility cards featuring either a Pentium 100-megahertz processor on a 12-inch card (M4092LL/A) or a 586 100-megahertz processor on a 7-inch card (M4091LL/A). These PC Compatibility Cards let you run MS-DOS and Windows applications directly on your Power Macintosh computer. You can switch instantly between Mac OS, Windows, and MS-DOS environments with a single keystroke.

- Orange Micro has announced a version of their Orange PC card for PCI based Power Macintosh computers. The Orange PC cards use an expansion slot inside of your Power Macintosh 9500 series computer. You can get more information by contacting Orange Micro directly. Their phone number is 714-779-2772.

- Reply, Inc. has also announced a version of their DOS on Mac card for PCI based Power Macintosh computers. The Reply cards use an expansion slot inside of your

Power Macintosh 9500 series computer. You can get more information by contacting Reply directly. Their phone number is 800-801-6898.

- You can use Insignia Solutions' SoftWindows emulator. This is a Macintosh application which emulates a PC DOS/Windows environment. You can get more information, such as pricing, performance, system requirements, and compatibility information from Insignia by calling them at 800-848-7677.

These articles can help you answer additional questions you may have about the Power Macintosh 9500 series computers:

- "Power Macintosh 9500 Series: Memory Questions & Answers"
- "Power Macintosh 7500, 8500, 9500 Series: SCSI-2 Compliance"
- "Difference Between a SIMM and a DIMM"
- "Power Macintosh 9500 Series: Technical Specifications"
- "Power Macintosh Processor Upgrade Card: Specifications"

These articles can help you locate the software update mentioned here:

- "Where To Find Apple Software Updates" - Lists online services for free Apple software updates.
- "Obtaining Apple Product Support in the USA" - Lists 800 numbers and online services for software updates, Apple support information, and a subset of the Apple Tech Info Library.

Article Change History:

- 20 May 1996 - Updated information.
- 29 Mar 1996 - Updated information.
- 13 Nov 1995 - Updated with additional technical information.

Copyright 1995-96, Apple Computer, Inc.

Keywords: kppc, kalley,kfaq,ktoptil

=====

This information is from the Apple Technical Information Library.

19960524 08:22:11.00

Tech Info Library Article Number: 18056