



Tech Info Library

Macintosh Performa 6100: Frequently Asked Questions (12/95)

Revised: 12/20/96
Security: Everyone

Macintosh Performa 6100: Frequently Asked Questions (12/95)

=====
Article Created: 20 July 1995
Article Reviewed/Updated: 04 December 1995

TOPIC -----

This document contains the answers to frequently asked questions (FAQ) about Macintosh Performa 6100 series computers.

Questions in this FAQ:
=====

- 1) What is the difference between native software and conventional software?
- 2) I bought a Macintosh Performa 6100 series computer and added an AV card. Can I get software that supports the video digitizer?
- 3) My computer does not remember sound settings from restart to restart. I continually have to go back to the Sound control panel and reset the CD input source.
- 4) What causes Type 11 errors?
- 5) Does my Power Macintosh have an FPU? I see errors that an FPU is not installed.
- 6) Can you install the Apple TV/Video System in a Performa 6115?
- 7) What is the difference between a Power Macintosh 6100 and a Macintosh Performa 6100 series computer?
- 8) I need to run DOS software on my Performa 6100 series computer. What are my options?
- 9) My microphone from my LC II does not work on my Performa 6100 series computer. What's wrong?

10) I have an old program which tells me to turn off 32-bit addressing. But I don't see this as an option in my Memory control panel. Why?

11) The sound from my 15" Multiple Scan Display is very low. Sometimes, I can only hear sound out the left speaker. What is wrong?

12) I have a Macintosh Performa computer which was shipped with a CD-ROM. I have purchased a third-party disk management utility or virus detector which states I should use a "Disk Tools" disk in order to create an emergency disk. I did not receive one with my computer. Should I have?

DISCUSSION -----

1) Question: What is the difference between native software and conventional software?

Answer: The Power Macintosh runs in two modes, without any further assistance from the user: it can run "native" software, which is software written for the PowerPC chip, or "conventional" software, which is software written for an older 68000, 68020, 68030, or 68040-based computer. Conventional software is sometimes referred to as "68K" software.

Conventional software runs in an "emulation" mode, which is functionally similar to the 68020 processor. The main differences between this processor and later processors are: (a) it does not have a PMMU (Paged Memory Management Unit), (b) it does not support the SWAP16 instruction, and (c) it does not support a floating point unit. The first point is necessary because the PowerPC has a newer, better, memory management model. The second point is also addressed by improvements in the PowerPC chip. The third point requires different steps to work around; see the FAQ question below. Conventional software will generally run faster than a 68020, probably between Macintosh IIci and Quadra 605 performance, depending on how many references the software makes to the native "toolbox" in the computer.

As new software is sold, you will find reference to "Fat" applications. These are programs that can be run on either a 68K or Power Macintosh computer without modification. The operating system automatically determines which part to use.

Since "Fat" applications are really two programs in one, many installers will offer either a "Power Macintosh" or "Conventional" install. If you have installed a software billing itself as "Accelerated for Power Macintosh" and, once installed, it does not recognize features which definitely exist, such as an FPU, make sure you have installed the correct version and build. Both versions will run on the Power Macintosh, but only the "native" version will benefit from all the special features of the Power Macintosh.

2) Question: I bought a Macintosh Performa 6100 series computer and added an AV card. Can I get software that supports the video digitizer?

Answer: You should contact the Apple Assistance Center at 800-538-9696. They can determine what software you are entitled to receive with the card.

3) Question: My computer does not remember sound settings from restart to restart. I continually have to go back to the Sound control panel and reset the CD input source.

Answer: If the Sound Preferences file, which stores much of this information, is corrupted, the settings may not be getting saved. To resolve this, open your System Folder, then your Preferences folder. Throw away Sound Preferences, and restart. Try to reproduce the problem.

If you have installed any type of disk compression or disk management software, check to make sure that it is not manipulating any of your Preferences files.

4) 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.
- RAM problems: you've installed bad RAM.
- SCSI chain problems: bad driver or cable.
- Cache SIMM problems (if you have installed one on your Performa computer).
- Incompatible software running in emulation.

For steps on how to troubleshoot such problems, see the referenced Technical Information Library article.

The online Apple Technical Info Library (go shortcut "TIL") - use the search string "meaning of error type 11 and power macintosh" to locate the article "Power Macintosh: Meaning of Error Type 11".

5) Question: Does my Power Macintosh have an FPU? I see errors that an FPU is not installed.

Answer: All PowerPC chips, which are used on Power Macintosh computers, have a floating point unit.

You may be seeing the "FPU not installed" error for two reasons:

- You are running "conventional" software in 68K emulation. This operating mode does not provide access to the computer's floating point unit. Thus, the program does not work. Certain software "bridges" exist to allow conventional software access to the PowerPC's FPU. See the Redgate Communications area to search for such products.
- You are using software, in either emulation or native mode, which is simply failing. Since the PowerPC supports pipelining instructions, a number of errors are occurring simultaneously. They are eventually percolating out as an "FPU not installed" error. An error did occur, but it has nothing whatsoever to do with

the need for a floating point unit. You should apply standard troubleshooting steps to resolve this issue.

6) Question: Can you install the Apple TV/Video System in a Performa 6115?

Answer: No. The Apple TV/Video System is designed for the Performa 630 series of computers.

You can, however, install an Apple AV Technologies Video Card in the Performa 6115.

7) Question: What is the difference between a Power Macintosh 6100 and a Macintosh Performa 6100 series computer?

Answer: The Macintosh Performa 6100 series computers use the basic architecture of a Power Macintosh 6100/60. They all include CD-ROM drives, while CD-ROM drives are optional equipment on a Power Macintosh. Different Performa models come with different sized hard disks, depending on the market. Performas also come with a variety of software and CD bundles, while the Power Macintosh computers only come with the basic system software. All Performas come with a Global Village Gold II modem, while Power Macintosh computers do not come with any at all. And all Performas come with a 15" Multiple Scan Display, while Power Macintosh users are free to choose their own monitor.

As you can conclude from the above, the Performas are popular with people just starting out with computing, or who have needs that can be nicely satisfied by a complete bundle. Power Macintosh computers are favored by people who may have hardware or software left over from a previous computer, or who have very specific applications they wish to use, and who wish to "build" their own, custom configuration.

8) Question: I need to run DOS software on my Performa 6100 series computer. What are my options?

Answer: There are two ways to run DOS software:

- 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 800-877-4292.
- You can use the Apple DOS Compatibility Card. This is a hardware solution, providing a 486 DX2 processor running at 66 MHz, SoundBlaster support, alternative video support, and up to 32 MB of on-board memory. This effectively produces a "dual processor" environment for your computer, in which Macintosh and DOS applications can run at full processor efficiency, simultaneously.

This card plugs into your single Processor Direct Slot. If you opt to use this card, you will not be able to use other PDS cards, such as an Apple AV Technologies Card, without removing this card, first.

9) Question: My microphone from my LC II does not work on my Performa 6100 series computer. What's wrong?

Answer: The microphone used with an LC II is called the Apple Omnidirectional Microphone. It comes with a 1/2" plug. The one used with the Performa 6100 series computers (as well as all Power Macintosh computers, the Performa 475/6, 500 series computers, 600 series computers, and Quadra 660AV and 840AV) is called a PlainTalk microphone. It has a 3/4" plug, the extra 1/4" of which is to reach a power source which drives an internal amplifier in the microphone.

You need to get a PlainTalk microphone. Our part number is M9060Z/A. You can order this through many Apple-authorized service providers and catalog resellers. Their numbers can be obtained by contacting our 24-hour referral service, 800-538-9696.

The online Apple Technical Info Library (go shortcut "TIL") - use the search string "plaintalk microphone" to locate the article "Macintosh: PlainTalk Audio Port Microphone Support".

10) Question: I have an old program which tells me to turn off 32-bit addressing. But I don't see this as an option in my Memory control panel. Why?

Answer: The Power Macintosh always runs in 32-bit mode. There is no way to turn it off; therefore, there is no switch in the Memory control panel.

11) Question: The sound from my 15" Multiple Scan Display is very low. Sometimes, I can only hear sound out the left speaker. What is wrong?

Answer: Most likely, the cable is not plugged in securely on the monitor's side. Remove it, then plug it back in, firmly. If this does not help, completely unplug the cable from both the Macintosh side and the monitor side, then exchange the ends.

You may also wish to check your "Volumes" setting in the Sound control panel. Select "Control Panels" from the Apple menu, then open the Sound control panel. You will see a window which lets you set your alert volumes. Click on the pop-up menu at the top of the window, then select "Volumes." Make sure your speaker volume is set to a non-low value.

12) Question: I have a Macintosh Performa computer which was shipped with a CD-ROM. I have purchased a third-party disk management utility or virus detector which states I should use a "Disk Tools" disk in order to create an emergency disk. I did not receive one with my computer. Should I have?

Answer: Apple currently ships a CD-ROM drive as part of many Performa computers. If you received a Macintosh Performa CD as part of your bundle, that effectively replaces a conventional Disk Tools disk: in addition to containing conventional disk diagnostic software, it also contains a complete back-up of your system.

In many cases, you can still use the Performa CD as a start-up disk, then insert a diskette containing whatever disk-based software you need to run.

If the software you are using does not support the use of a Performa CD, or does not contain instructions on how to use the Performa CD with that product, you should contact the manufacturer of the software for further assistance.

Article Change History:

04 Dec 1995 - Added keyword.

20 Nov 1995 - Revised title.

02 Nov 1995 - Updated Type 11 error search string.

Support Information Services

Copyright 1995, Apple Computer, Inc.

Tech Info Library Article Number:18224