



## Sonnet PCI X Install 1.2.6

Read Me Notes

Updated: November 14, 2002

### Description

This software enables you to install Mac® OS X on your “unsupported” PCI class Power Macintosh® or Macintosh clone computer with a Sonnet Crescendo™/PCI, or a MAXpowr PCI processor upgrade card. Various files are installed to properly support L2 (and L3) cache, and a control panel is installed that enables you to switch between Mac OS 9.1 and OS X. For more information, refer to the General Information section below.

**Because additional preparation is required before running this installer, you should print *and read* these notes prior to performing the installation; FOLLOW THE INSTRUCTIONS CAREFULLY. It is likely you will need to quit this installer to perform some of the steps necessary to prepare your system for this software installation.**

We recommend that you make a backup of important information on your hard drive(s) prior to installing new hardware or software. Also, read the documentation included with the Mac® OS X software package *before* installing this software and Mac OS X.

If you are only performing an upgrade installation from a previous version of Mac OS X, skip to Installation Instructions.

### Before You Install OS X

- Before installing this software, make sure your system meets Apple’s memory, video, and drive space requirements for OS X installation. Apple recommends at least 128 MB of RAM and 3 GB of drive space *only* for Mac OS X; you may need additional hard drive space and RAM to install and run programs.
- Sonnet strongly recommends that you install Mac OS X onto a different clean hard drive or partition from OS 9.1; these instructions assume that this is the configuration you will use. For information on how to use Apple’s Drive Setup utility to partition your hard drive, log onto the Internet and type <http://docs.info.apple.com/article.html?artnum=19286>. If you are using hard drive management tools other than Apple’s, see your software’s user manual for information on partitioning.

- If you are installing Mac OS X onto a drive with a capacity greater than 8 GB, the drive *must* be partitioned into two or more volumes. The partition containing the OS X installation must be 8 GB or less, and be completely contained within the *first* 8 GB of the drive. For more information, refer to the “Read Before You Install.PDF” document included on the Mac OS X CD.

- Install Mac OS 9.1 (not OS 9.2.1 or later), if necessary.

If you have not already installed (or updated to) OS 9.1, perform a complete installation of Mac OS 9.1 onto a different hard drive or partition than where you will install OS X, whenever possible. Also, install or update all other software for this Mac OS 9.1 drive/volume. Note: Neither this Sonnet software nor your PCI Macintosh is compatible with Mac OS 9.2.1 or later. If you have any version of Mac OS 9 prior to 9.1, you can visit Apple’s web site and download the update free of charge.

## Installation Instructions

1. Boot your system in Mac OS 9.1 from a hard drive/partition, *not* a CD-ROM.

2. Insert the Mac OS X CD into your CD-ROM drive and allow it to mount to your desktop; if the Mac OS X CD was not inserted when you started this installer, the software will not be installed. The CD-ROM drive you use must support booting from a Mac OS X CD.

3. Start Sonnet PCI X Install.

Click the **Switch Disk** button (repeatedly, if necessary) to select the partition or drive where OS X will be installed, otherwise the incorrect drive/partition will be selected automatically. Click the **Install** button to start the installation process.

4. Choose the software installation destination.

When the *Destination Selection* window appears, click the triangle next to the disk or partition you’ve selected for Mac OS X software installation, select the folder with “:System:” in the name, then click the **Continue** button.

5. Select the Mac OS X CD.

When the *CD Selection* window appears, double-click the triangle next to the Mac OS X CD, click to select the Mac OS X CD, then click the **Continue** button.

6. Complete Sonnet PCI X Install and start Mac OS X installation.

Once the Sonnet PCI X Install software installation is complete, a dialog box will appear. Click the **Restart** button; your system will restart and automatically boot from the Mac OS X CD. Be patient; it will take several minutes before the first Mac OS X installation window appears.

7. Follow the instructions to install Mac OS X software.

Select the exact same drive or volume as used during the Sonnet PCI X Install for the Mac OS X destination. When presented with the option, *do not choose Erase Destination*; needed files have already been copied to the software installation destination.

## General Information

- This software has been tested and known compatible only with Mac OS 9.1 and Mac OS X

versions 10.0.x through 10.2.x; it does not support Mac OS 9.2.1 or later Mac OS 9 versions.

- New in Version 1.2.6
  - Enables Apple System Profiler to correctly display L2 and L3 cache.
  - Adds support for use of Mac OS X Version 10.0.3 Install CD.
  - Fixes an issue that caused the arrow cursor to appear incomplete on systems running Mac OS X Version 10.2.
  - Fixes an issue that prevented Classic mode startup under Mac OS X Version 10.2 in systems upgraded with a Crescendo/PCI G4 or MAXpowr PCI G4 processor card.
  
- New in Version 1.2.5
  - Adds support for Mac OS X Version 10.2.
  - Adds support for the Crescendo/PCI G4 800 MHz/1M processor upgrade card.
  - Simplifies installer process for Sonnet PCI X Install.
  - Fixes issue that required "Startup Disk" North American Version 9.2.1 to be downloaded.
  - Allows add-on PCI video cards; onboard video is no longer a requirement.
  
- New in Version 1.2
  - Allows Mac OS X Software Update control panel to "see" available Mac OS X updates.
  - Adds L2 cache enabling support for some MAXpowr cards.
  - Changes name of L2 cache enabler kernel extension from SonnetCPUDriver.kext to SonnetCache.kext.
  - Enhances L2 cache enabler kernel extension to be more robust, speed boot process.
  - Adds support for 7410 processor L2 cache.
  
- New in Version 1.1.2
  - Adds Mac OS X Server support.
  - Adds Mac OS X "Upgrade" CD support.
  - Fixes issue that prevented Mac OS X Software Update control panel from "seeing" available updates.
  
- New in Version 1.1.1
  - Restores compatibility with Mac OS X Version 10.0.x.
  - Software renamed "Sonnet PCI X Install".
  
- New in Version 1.1
  - Adds Mac OS X Version 10.1 support.
  - Unifies installer for Crescendo/PCI OS X Install and MAXpowr PCI OS X Install.
  
- New in Version 1.0.3
  - Fixes issue with the Crescendo OS X installer not completing the software install on some Power Computing PowerWave, UMAX J700 and S900 computers with either a CD-ROM drive or hard drive connected to a PCI card.
  - Updates web address references in Read Me notes.
  
- New in Version 1.0.2

- Fixes issue with the Crescendo OS X installer not copying all necessary files due to the effect your system's Time Zone setting on the Created and Modified dates of certain files.
- Corrects web address reference in Read Me notes for North American English Startup Disk Control Panel 9.2.1 download.
- This software enables the installation/use of Mac OS X only in the following Macintosh® and Mac-compatible models with a Crescendo/PCI or MAXpower PCI processor upgrade card:
  - Power Macintosh 7300, 7500, 7600, 8500, 8515, 8600, 9500, 9515, 9600
  - Workgroup Server 7350, 8550, 9650
  - DayStar Genesis and Millennium Series
  - MacTell XB-Pro
  - Power Computing PowerCenter, PowerCurve, PowerTower (Requires an add-on PCI video card; onboard video is not supported.)
  - Power Computing PowerCenterPro, PowerTower Pro, and PowerWave
  - UMAX J700, S900
- When this installer is run, it will create a "Startup Disk X" Control Panel that enables your machine to switch back and forth between Mac OS 9.1 and Mac OS X. This installer will also pre-copy extra kernel extensions that support Power Macintosh 7300-9600 models, and the Sonnet L2 Cache Enable kernel extension to your Mac OS X destination volume. When installed in systems running North American English version of Mac OS 9.1, the original Startup Disk Control Panel is moved to the Control Panels (Disabled) folder.

- **Known issues**

- Certain SCSI hard drives are not capable of booting Mac OS X. (Mac OS X issue)
- Mac OS X cannot be installed on certain SCSI hard drives. (Mac OS X issue)
- Internal floppy drives are not supported under Mac OS X or Mac OS X Classic environment. (Mac OS X issue)
- Serial printers are not supported under Mac OS X or Mac OS X Classic environment. (Mac OS X and third-party vendor issue)
- Certain CD-ROM drives (typically 2x-4x speeds) will not allow booting from the Mac OS X CD when the CD ROM drive is connected on the fast internal SCSI bus.
- Mac OS X is unable to boot from drives connected to a PCI card installed in one of the lower 3 slots of the Power Macintosh 9500 and 9600.
- The USB ports on the Sonnet Tango™ PCI card do not function under Mac OS X versions prior to 10.1. (Mac OS X issue) Tango FireWire ports are functional in all versions.
- SCSI termination errors that are ignored in Mac OS 9.1 may cause errors in Mac OS X. Users MUST make sure that devices in any SCSI chain are properly terminated.

## **Troubleshooting Information**

- If you encounter the error message "File not found: Mac OS X", you must quit this installer, insert the Mac OS X CD into your CD-ROM drive and wait for the Mac OS X Install window to open, then start this installer again.
- If you encounter the error message "Unable to set Open Firmware variables," you must quit the installer and use only hard drives and CD-ROM drives that are connected to the internal SCSI bus

for both the installation CD and destination drive. Please inform Sonnet Customer Service about your specific configuration.

- If the Sonnet PCI X Install software installation completes, but your system hangs or fails to start the OS X installation after you click the Restart button, shut down your system; you must temporarily alter your system by removing PCI cards and disconnecting peripherals to isolate the cause of the problem.

1. Allow a few minutes for your system to cool, then disconnect all unnecessary peripherals (if possible, leave only your keyboard, mouse, and monitor connected).
2. Touch a port access cover on the back of your computer to discharge static. Be sure to take all precautions against static discharge during this process, or you may inflict permanent damage to part, or all of your computer.
3. Disconnect the power cable, then open your computer and remove all unnecessary PCI cards (if you are using a PCI video card, you should disconnect your monitor from it and connect the monitor to the onboard video connector). Also disconnect any unneeded drives from the internal SCSI buses.
4. Reconnect the power cable to your computer, then start your system again.
5. Run this installer again. (If OS X does not install successfully at this point, create an Apple System Profiler report [see the last bullet point], then contact Sonnet Customer Service at (949) 472-2772 for further assistance, otherwise continue to the next step.)
6. After completing the OS X installation, shut down your system again.
7. Discharge static, disconnect the power cable, then reinstall one PCI card back into your system, or reconnect one peripheral device.
8. Reconnect the power cable and restart your system; run your system in Mac OS X for a while. If everything continues to operate normally, repeat steps 7 and 8 until you have reinstalled all your PCI cards and connected all your peripherals. If your system encounters any problems, go to the next step.
9. Shut down your computer again, discharge static, disconnect the power cable, then remove the card you just installed, or disconnect the peripheral you connected.
10. Without adding a card or connecting a peripheral, reconnect the power cable and restart your system; run your system in Mac OS X for a while. If everything continues to operate normally, it is possible that the PCI card or peripheral device is causing a conflict. Repeat steps 6 through 9 until all conflicting PCI cards or peripheral devices have been isolated. Check with the manufacturer(s) of the conflicting PCI card(s) and/or peripheral(s) for updated OS X drivers. If OS X drivers are not available, then the conflicting card or peripheral will not be supported under OS X and should not be used.

- If you encounter problems restarting or booting Mac OS X after the Sonnet PCI X Install software installation, (e.g. computer restarts repeatedly, or the broken system folder icon appears), restart your system in "verbose mode" (hold down the cmd +V keys while the system boots). During the startup process, you will see text scroll up the screen, and the boot process will stop; write down the text that appears on screen. Along with an Apple System Profiler report (see the last bullet point for directions), e-mail the information to Sonnet Customer Service for further assistance.

- After installing this software and Mac OS X, if your system will not boot into OS 9.1 or OS X

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