

**Avid Support**  
**Mac Cheatsheet Ver. 2.0**

**Covers: Media Composer 3.5 // Symphony 3.5**

Topic:	Page:
<b>Current Version Notes:</b>	<b>2</b>
<b>Apple OS X / Quicktime Compatibility</b>	<b>2</b>
• Supported Editor versions	
• Supported Quicktime versions	
• Supported OS versions	
<b>Minimum System Requirements</b>	<b>2</b>
<b>Supported Computers:</b>	
• Mac Laptops	<b>3</b>
• Mac Workstations	<b>4</b>
<b>Macintosh Slot configurations</b>	<b>4</b>
<b>Unity Compatibility</b>	<b>5</b>
<b>Software Licensing</b>	<b>5</b>
<b>Troubleshooting Suggestions</b>	<b>6</b>
<b>DIY Information &amp; Related Links:</b>	<b>9</b>
<b>QuickTime Links &amp; Notes</b>	<b>10</b>
<b>How do I uninstall QuickTime?</b>	<b>11</b>

Avid Customer Support has created this document with the help of its customer base. It is intended to help properly configure and troubleshoot Mac editing systems. Included are some tips and tricks to maximize performance and stability of your system. Follow the tips in the document and the initial installation and configuration will be very simple.

We want this to be a "living doc", updated and changed as Apple and Avid products evolve. Please use the feedback button below to let us know what you think. If you are less than 100% satisfied with the document you will be presented with a form to send comments or corrections. Use a made up email address if anonymity is desired. You can also contact me directly: [bradley\\_benkle@avid.com](mailto:bradley_benkle@avid.com)

If you are looking for information previous to version 3.5 then please download Mac Cheat sheet version 1.8.1

**Current Version Notes:**

- **3.5 is only supported on Intel based workstations running Leopard 10.5.5 or 10.5.6 (3.5 no longer supports Power PC workstations or Tiger)**
- **If you are upgrading from a previous version of the Macintosh editing application, remove the Stereo Mixer.dpm and Surround Mixer.dpm plug ins from the following location:  
Macintosh HD/Library/Application Support/Digidesign/Plug-Ins.  
If you do not remove these files, you might experience problems with the AudioSuite Tool.**

**Apple OSX / QuickTime Compatibility:**

Apple designed its operating system to include the majority of hardware interface protocols. This approach has pros and cons. The benefit is that most devices are plug-n-play on the Mac. The disadvantage is that the version of the Mac OS has a much larger effect on the hardware-related applications, namely, your Media Composer. Likewise, QuickTime and its codecs are foundational to the Avid editors. Changes to the QuickTime version can have significant effects on the performance and stability of the Avid editing application.

<i>Editor Version</i>	<i>Mac OS</i>	<i>QuickTime</i>
<b>3.5</b>	<b>10.5.5/10.5.6*</b>	<b>7.5.5/7.6</b>

\*Symphony Nitris DX only supports OSX Leopard 10.5.6

**Minimum System Requirements for Version 3.5****Processors**

- Intel dual, dual core 2.66 GHz Xeon
- Intel Core 2 Duo 2.33 GHz (laptops)

**System Memory**

- 2GB of RAM
  - If working with complex sequences, (multiple effects/streams) or compressed HD resolutions 4GB of RAM is recommended

**Graphics Card**

- NVidia GeForce Family
  - Full Screen play feature requires a minimum of 128MB of graphics memory

**Internal Hard Drive**

- 40GB minimum hard disk drive
  - Any media drives need to be 7200RPM or greater

**Optical Drive**

- DVD Capable drive required for product installation

### Qualified Mac Notebooks

Qualified Workstation	Summary	Avid SW Only	Mojo DX or Mojo SDI
Macbook Pro	2.53 GHz Intel Core 2 Duo processor, 15" display. 4GB 1066MHz DDR3, 250GB ATA 7200 rpm drive, Nvidia GeForce 9400M and 9600M GT	√	√
Macbook Pro	2.5 GHz Intel Core 2 Duo processor, 15" & 17" Display	√	√
Macbook Pro	2.4 GHz Intel Core 2 Duo processor, 15" & 17" Display	√	√
Macbook Pro	2.16 GHz Intel Core Duo processor, 17" Display	√	√
Macbook Pro	2.33 GHz Intel Core 2 Duo processor, 17" Display	√	√
Macbook Pro	2.16 GHz Intel Core Duo processor, 15" display	√	√
Macbook Pro	2.33 GHz Intel Core 2 Duo processor, 15" Display	√	√

- **DNxHD capture not supported on Mojo DX notebooks**
- **Nitris DX is not supported on notebooks**

This list of Supported Laptops has NOT been approved for use with Shared Storage, including:

- Avid Unity MediaNet: Ethernet and Fibre (including LANshare)
- Avid Unity ISIS

### Qualified Workstations

Qualified Workstations	Summary	Avid SW Only	Nitris DX	Mojo DX	Mojo Mojo SDI Or Adrenaline	Unity MN Ethernet / Fibre or ISIS	Notes
Mac Pro (early 2008)	Dual Quad-Core 3.0 or 3.2 GHz "Harpertown"	√	√	√	√	√	GeForce 8800GT
Mac Pro	Dual Quad-Core 3 GHz or higher Intel processor	√	√	√	√	√	Support for NVIDIA GeForce 7300 GT 256MB graphics card
Mac Pro	Dual Dual-Core 2.66 GHz or higher Intel processor	√	√	√	√	√	Support for NVIDIA GeForce 7300 GT 256MB graphics card - DNxHD capture not supported on Mojo DX
iMac	2.33 GHz or lower Core 2 Duo Intel processor, 24" Display	√	X	X	Mojo Only	X	Support for NVIDIA GeForce 7600 GT 256MB or NVIDIA GeForce 7300 GT 128MB graphics card

- Mac Pro "Nehalem" (early 2009) is in the process of being qualified

### Slot Configurations

The location of the SCSI, FireWire or Fibre Channel cards can greatly affect performance and bus speed. Please make sure to have the storage card in the correct slot for better performance. Also note the information about the ***Expansion slot utility for MacPro systems, noted on Page 11.***

### MacPro "Harpertown"

Slot	Description
PCIe Slot 1, 2.0 16 Lanes	Nvidia GeForce 8800GT
PCIe Slot 2, 2.0 16 Lanes (x16)	ATTO FC41-ES 4GB single-channel PCIe F/C adapter <ul style="list-style-type: none"> <li>• Provides Avid Unity MediaNetwork connectivity</li> </ul>
PCIe Slot 3, 2.2 4 Lanes	<ol style="list-style-type: none"> <li>1. ATTO UL5D PCIe Dual Channel SCSI controller <ul style="list-style-type: none"> <li>• Provides VideoRaid RTR and MediaDock connectivity</li> </ul> </li> <li>2. ATTO ExpressSAS R380 PCIe RAID controller <ul style="list-style-type: none"> <li>• Provides Avid VideoRAID ST/SR connectivity</li> </ul> </li> <li>3. ATTO Express SAS H380 HBA <ul style="list-style-type: none"> <li>• Provides Avid VideoRAID ST/SR connectivity</li> </ul> </li> </ol>
PCIe Slot 4, 1.1 4 Lanes	PCIe Host Interface Board (HIB) <ul style="list-style-type: none"> <li>• Provides Nitris DX/Mojo DX connectivity</li> </ul>

**Mac Pro (non-Harpertown)**

Slot	Description
PCIe Slot 1, 2.0 8 Lanes	Nvidia GeForce 7300GT
PCIe Slot 2, 8 Lanes (x16)	ATTO FC41-ES or ATTO FC41-EL 4GB single-channel PCIe F/C adapter <ul style="list-style-type: none"> <li>Provides Avid Unity MediaNetwork connectivity</li> </ul>
PCIe Slot 3, 4 Lanes	<ol style="list-style-type: none"> <li>ATTO UL5D PCIe Dual Channel SCSI controller <ul style="list-style-type: none"> <li>Provides VideoRaid RTR and MediaDock connectivity</li> </ul> </li> <li>ATTO ExpressSAS R380 PCIe RAID controller <ul style="list-style-type: none"> <li>Provides Avid VideoRAID ST/SR connectivity</li> </ul> </li> <li>ATTO Express SAS H380 HBA <ul style="list-style-type: none"> <li>Provides Avid VideoRAID ST/SR connectivity</li> </ul> </li> </ol>
PCIe Slot 4, 4 Lanes	PCIe Host Interface Board (HIB) <ul style="list-style-type: none"> <li>Provides Nitris DX/Mojo DX connectivity</li> </ul>

Mac Pro			
Local Storage(SCSI/SAS)	Firmware	Driver	Located in:
UL5D	2.10	4.32	Slot 3
ATTO ExpressSAS H380	2.10	1.14	Slot 3
ATTO ExpressSAS R380	1.0	2.10	Slot 3
Shared Storage (Fibre Card)		Driver	Located in:
FC41ES	2.51	3.21	Slot 2

**Mac OS X Unity Support in 3.5:**

Editing Application OS	ISIS Client Supported Version	ISIS Server Supported Version	MediaNetwork Client Supported Version	MediaNetwork Server Supported Version
Leopard 10.5.5 and 10.5.6	1.5, 1.6, 2.0.1	1.4, 1.5, 1.6, 2.0.1	5.1, 5.1.2	4.1.6, 4.2.4, 5.0.1, 5.1

## **Fibre Channel and Ethernet Client Software**

Avid does not support running both the Fibre Channel client software and the Ethernet client software on the same Mac OS X client. The Fibre Manager can display up to 400 workspaces in the Connections window. DNS Server Mac OS X Ethernet clients need to connect to a network that has a domain name services (DNS) server so that they can properly identify servers and clients that are part of the network. If you do not plan on connecting the MediaNetwork workgroup to a network that contains a DNS server, Avid recommends that install and configure a DNS server on one of your PortServer systems. To install and configure the DNS server, see the Appendix in the File Manager Setup Guide.

## **Software Licensing**

Avid has recently changed the way our software is licensed. Instead of a hardware key, we now use a license key. In order to facilitate this migration of licensing please visit our website to answer any of your questions: <http://avid.com/go>

## **Duplicate Volume Names**

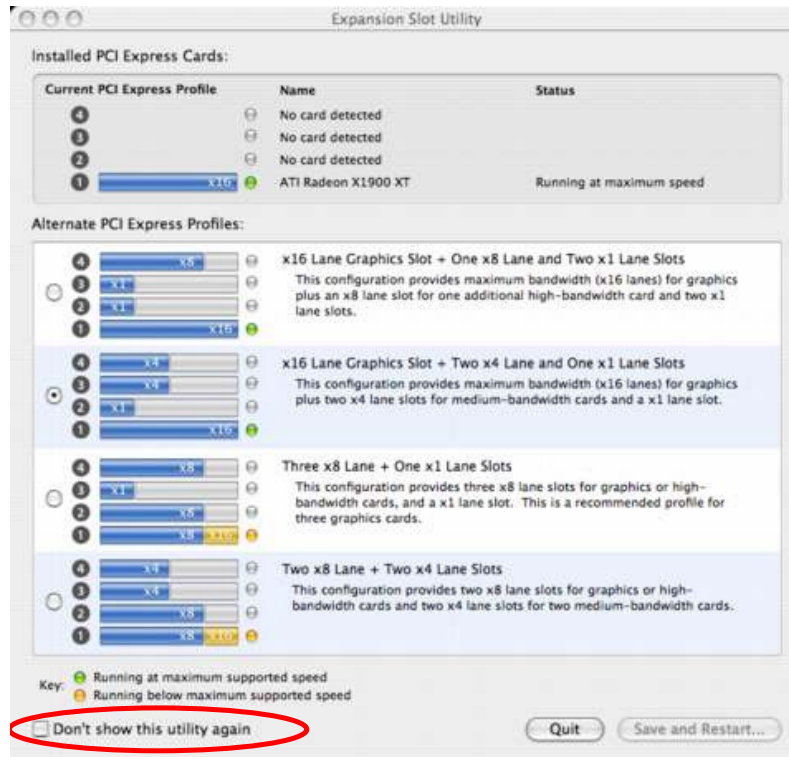
When mounting drives the OS gives it a generic name of “untitled” or “NO NAME”. In order for media composer to see the mounted volumes no two volumes can have the same name. When mounting a volume give it a specific name and you will not have any issues from within Avid.

## **Troubleshooting Techniques**

### **Expansion Slot Utility on Mac Pro**

With the Mac Pro systems (except Harpertown), you have the ability to change (or re-assign) the speed of the PCIe slots, with something called the **Expansion Slot Utility**. If you install a new hardware card, this utility should automatically come up for you. If it does not come up automatically, the Utility is located here:

**MacHD\System/Library/CoreServices**



The check box in the lower left-hand corner (“Don’t show this utility again”) would prevent it from coming up automatically in the future. It is recommended that you leave this check box Unchecked, for future expansion.

This Utility is a good place to check if your PCI-E based Storage card is not performing as well as expected.

Avid recommends using the Second (2<sup>nd</sup>) option for standard installations. That option covers both a Single card and Dual card installations. For example, having an ATTO UL5D and a 41ES Fibre card installed, this would give equal bandwidth for both your card configuration. Both the UL5D and 41ES are 4X bandwidth cards.

\* PLEASE REFER TO THE PCI-E CARD MANUFACTURER to verify the proper speeds of the cards you are trying to install.

More in-depth explanation of the slots and behavior on Mac Pro:

<http://docs.info.apple.com/article.html?artnum=304122>

### Resetting the SMC (On MacPro Machines)

Unlike models of Power Mac G5 or Power Mac G4 computer, the Mac Pro computer does not have a PMU or Power Management Unity. This functionality has been replaced by the SMC:

Mac Pro: How to reset the System Management Controller (SMC):

<http://docs.info.apple.com/article.html?artnum=304123>

## Disk permissions

These can be repaired if the system is acting up, or if there have been a lot of applications uninstalled or reinstalled recently. Once you open the Disk Utility (HD >Applications>Utilities>Disk Utility), you select your internal drive and the 'Repair Disk Permission' button becomes active. Click it and let it run. May take up to 10 minutes. Also, Apple recommends that you repair disk permissions BEFORE and AFTER any system or OS update. <http://support.apple.com/kb/HT1452>

## Run 'fsck' on your internal drive

- boot into single user mode by restarting, and holding down: Apple+S.
- Once booted in, you should have a black screen with white text, type the following:  
`/sbin/fsck -y`
- fsck goes through and checks file system consistency and interactively repairs the file system. • When finished, type 'reboot' and it will reboot.  
<http://docs.info.apple.com/article.html?artnum=106388>

## System Preferences & Settings to check:

**Appearance** – Disable 'Smooth Scrolling' (may not make much of a difference, but could help)

**Dock** – you can turn 'Magnification' off if you want to. As well as 'Animate opening applications.'

**Security** – *File vault* – make sure it's off. Select 'Disable Automatic Log-in'

**Energy Saver** – everything should be set to 'Never'

Also, under 'Options', set processor performance to 'Highest' NOT 'Automatic'

<http://docs.info.apple.com/article.html?artnum=86612>

**Display** - matching resolution and refresh rates) also check that the resolution is native for flat panel(s)

**Screensaver** – none. Can also disable any 'Hot Corners'

**Accounts** – Fast user switching turned off.

**Users** – make sure that they have only admin users.

**Software Update** (and *Automatic Update* for QuickTime) – Both should be turned off.

**Sharing** – All options could be turned off.

**Speech** – Could also be disabled.

**Universal Access** – Both options set to 'Off.' Also, since OS X added the ability to

create shortcut keys for almost any action or function, make sure that the Universal Access settings are not set to use any used keyboard shortcuts.

**Login Items** (located under 'Accounts') – you should keep this list as clear as you can.

**Dashboard/Expose** – for safety sake, set all options to the '-' listed at the bottom. Also, if you want to disable Dashboard entirely:

Launch Terminal and then enter the following commands.

To turn Dashboard off:

**defaults write com.apple.dashboard mcx-disabled -boolean YES**

To turn Dashboard on:



**defaults write com.apple.dashboard mcx-disabled -boolean NO**

You have to restart the Dock after making either change for it to take effect:

**killall Dock**

With thanks to:

<http://www.macintoshhints.com/article.php?story=20050723123302403&lsrc=osxh>)

**Spotlight** - After installing or upgrading to OS X 10.4, Spotlight might be automatically enabled on your media drives. For the best system performance, Avid recommends disabling Spotlight for your media drives.

To disable Spotlight:

- a. Go to System Preferences > Spotlight.
- b. Click Privacy.
- c. Select a disk on the desktop, click the + button to add to the list. (or drag & drop from the desktop)
- d. Repeat for every disk on the system. Do this for new disks are added too.

<http://docs.info.apple.com/article.html?artnum=301533>

**Time Machine** –If enabled, within your system preferences disable the Time Machine to backup your media.

## During the boot up

All the extensions that are marked as essential are put into cache files; which is used to speed startup. Throw out the following two (2) files and they should rebuild on restart. Those are found in:

/System/Library/**Extensions.kextcache** and **Extensions.kextcache**)

More info on those files and extensions within OS X:

[http://www.osxfaq.com/Tutorials/extensions\\_hell/index.ws](http://www.osxfaq.com/Tutorials/extensions_hell/index.ws)

## In some instances...

...physically pulling the Ethernet cable from the computer has also helped.

This falls into the category of, “Pull all the crap you can off the system”. If you are chasing a weird behavior with no clear source, it’s a good troubleshooting step to strip the system down to its most basic component parts: CPU, screen, keyboard & mouse. If there is a clear change in behavior without the peripherals attached, add them back in one-by-one and look for the error pattern to come back.

## Performing a Manual Uninstall

Since Media Composer 2.5, Avids on the Mac come with an “Avid Uninstaller” folder, located in the Applications folder. When that is run, there are some items that do not get pulled off (the DIO's being a few). If you want to do a complete, manual uninstall, remove the following items manually and re-install:

/Library/Receipts/  
AvidApplications.pkg

Avid<EditorName>Uninstaller.pkg (either "Avid MediaComposer" or "Avid Xpress Pro")  
AvidLibrary.pkg  
AvidSystem.pkg  
AvidLECodecs.pkg  
AvidPECodecs.pkg  
AvidDIORuntime.pkg  
AvidCoreRuntime.pkg  
/Library/Application Support/Avid (May require you to reinstall ProTools)  
/Applications/<EditorName>/ (either "Avid MediaComposer" or "Avid Xpress Pro")  
/Applications/ExpressStripe  
/Applications/Utilities  
UpgradeDriver  
Avid Storage Manager  
/System/extensions/  
ATTOExpressRAID\_Enabler.kext  
ATTORAIID\_OS10.kext  
Avid\_SCSI\_RBC.kext  
Avid\_SCSI.kext

#### Information & Links:

**Avid Download Center:** <http://avid.com/support/downloadcenter/index.asp>

**Latest Media Composer ReadMe:** [http://avidtechnology.custhelp.com/cgi-bin/avidtechnology.cfg/php/enduser/fattach\\_get.php?p\\_sid=FqmucCsj&p\\_li=&p\\_accessibility=0&p\\_redirect=&p\\_tbl=9&p\\_id=77765](http://avidtechnology.custhelp.com/cgi-bin/avidtechnology.cfg/php/enduser/fattach_get.php?p_sid=FqmucCsj&p_li=&p_accessibility=0&p_redirect=&p_tbl=9&p_id=77765)

**Latest Symphony ReadMe:** [http://avidtechnology.custhelp.com/cgi-bin/avidtechnology.cfg/php/enduser/fattach\\_get.php?p\\_sid=fmRXcCsj&p\\_li=&p\\_accessibility=0&p\\_redirect=&p\\_tbl=9&p\\_id=77769](http://avidtechnology.custhelp.com/cgi-bin/avidtechnology.cfg/php/enduser/fattach_get.php?p_sid=fmRXcCsj&p_li=&p_accessibility=0&p_redirect=&p_tbl=9&p_id=77769)

**Avid RAM Specs:** [http://avidtechnology.custhelp.com/cgi-bin/avidtechnology.cfg/php/enduser/std\\_adp.php?p\\_faqid=72256](http://avidtechnology.custhelp.com/cgi-bin/avidtechnology.cfg/php/enduser/std_adp.php?p_faqid=72256)

**MCA latest tech specs:** <http://www.avid.com/products/Media-Composer-Software/specs.asp>

**MCA latest sys requirements:**  
<http://www.avid.com/products/media-composer/systemrequirements.asp>

**Mac Pro (8-core): Memory and hard drive kit compatibility:**  
<http://docs.info.apple.com/article.html?artnum=305352>

**For best performance on Mac Pro, it is still recommended to install memory in the risers symmetrically:**  
<http://docs.info.apple.com/article.html?artnum=304492>

**Intel-based Mac Power On Self Test RAM error codes:**

<http://docs.info.apple.com/article.html?artnum=303083>

**Information on the computers, and DIY (Do It Yourself) manuals to add components to them.**

[http://www.apple.com/support/manuals/macpro\\_diy/](http://www.apple.com/support/manuals/macpro_diy/)  
[http://manuals.info.apple.com/en/MacPro\\_MemoryRiserCard-DIY.pdf](http://manuals.info.apple.com/en/MacPro_MemoryRiserCard-DIY.pdf)  
[http://manuals.info.apple.com/en/MacPro\\_PCleCard\\_DIY.pdf](http://manuals.info.apple.com/en/MacPro_PCleCard_DIY.pdf)  
[http://manuals.info.apple.com/en/MacPro\\_HardDriveCarrier\\_DIY.pdf](http://manuals.info.apple.com/en/MacPro_HardDriveCarrier_DIY.pdf)  
[http://manuals.info.apple.com/en/MacPro\\_OpticalDriveCarrier\\_DIY.pdf](http://manuals.info.apple.com/en/MacPro_OpticalDriveCarrier_DIY.pdf)

A handy reference for info on **EVERY** Mac ever made:

<http://www.everymac.com/systems/>

Apple's 101 area: <http://www.apple.com/support/mac101/>

(for learning the basics, as well as your way around the Mac)

list of Security Updates from apple: (March 11<sup>th</sup> 2009)

<http://docs.info.apple.com/article.html?artnum=61798>

An introduction to reading Mac OS X crash reports:

<http://www.macfixit.com/article.php?story=20060309075929717>

Avoiding and eliminating Kernel panics:

<http://www.macfixit.com/article.php?story=20060911080447777>

Information on Anti-Virus softwares on Macintosh. ( With thanks to MacFixit )

<http://www.macfixit.com/article.php?story=20060511065134478>

**Quicktime Links / Notes**

- Adobe AfterEffects CS4 Currently requires QuickTime 7.4.5 and Apple OS 10.4.11 or 10.5.4.

<http://www.adobe.com/products/aftereffects/systemreqs/>

- Adobe Photoshop CS4 currently requires QuickTime 7.4.5 and Apple OS 10.4.11 or 10.5.4.

<http://www.adobe.com/products/photoshop/photoshop/systemreqs/>

**Apple Quicktime Support page:**

<http://www.apple.com/support/quicktime/>

QT 7.5.5 (Mac Leopard):

<http://www.apple.com/support/downloads/quicktime755forleopard.html>

- CURRENT standalone installer for Mac & Win (Currently 7.6):

<http://www.apple.com/quicktime/download/standalone.html>

(NOTE: It is **not** necessary to enter your email address to download the installer. Also, sometimes the most Current version is not always the correct Supported version for Use with an Avid.)

### **How to Uninstall QuickTime?**

“Oops, Automatic Updates was turned on and I upgraded my QuickTime by accident! How do I go back???”

Unfortunately, this is easier said than done. QuickTime is a core part of OSX; as such, it can't be uninstalled directly. Instead, it is necessary to backrev the entire OS. Fortunately, this can be done **without deleting everything** on the system drive, by using Apple's process called “**Archive & Install**”

Apple, on occasion, releases 'Reinstallers'. These are designed to backrev the version of QuickTime on OSX systems to an older version without changing the OS version. However, they are limited in their availability and application.

### **Mac OS X Auto-login**

Avid recommends that you turn **OFF** the Mac OS X Autologin feature that takes you directly to a desktop when you boot the system rather than displaying a login window. Autologin prevents some necessary Avid files from initializing properly and this prevents the Connection Manager or the Fibre Manager from mounting workspaces on the desktop. For information about turning off Autologin, see your Apple documentation or Help.