Digidesign Product Compatibility Documents

Pro Tools | HD 1, HD 2, & HD 3

Mac OS

Digi 001

Mac OS Windows 98/Me

Pro Tools | 24 MIX, MIXplus, & MIX³

Mac OS Windows 2000

Mbox Mac OS

Pro Tools | 24

Mac OS Windows 2000

ToolBox XP, ToolBox CD, & Audiomedia III

Mac OS Windows 98/Me

Pro Tools III

Mac OS*

Pro Tools FREE

Mac OS* Windows 98/Me*

Avid Unity MediaNet

Mac OS

DigiStudio

Pro Tools 5.2 TDM Mac OS

Pro Tools 5.2.1 LE Mac OS

DigiTranslator

Mac OS

Recent Compatibility Updates

Change History - Revised March 25, 2002

2001 & 2002 G4 Qualification Summary

Pro Tools 5.1.3 Summary

Pro Tools|HD Summary

Avid Unity MediaNet

DigiDrive FireWire 80

MasterList CD

Mac OS

Soft SampleCell

Mac OS



2 MB download (save to disk first)



These documents contain compatibility information for current systems, Pro Tools|HD systems with Pro Tools software version 5.3, Pro Tools|24 & MIX TDM systems with Pro Tools software versions 5.1.1/5.1.3/5.2, and Pro Tools LE systems with Pro Tools LE software version 5.1.1, 5.2 & 5.2.1, except as noted. Items marked * are currently supported by version 5.0.1 only. For previous compatibility documents, see the Compatibility Archive. For additional technical information and specifications, see the Technical Document Library in Support and the All Products Index in the Products section of the website.

Please Note: Digidesign products are **not currently compatible with Mac OS X or Windows XP operating systems**. Digidesign is actively working with Apple and Microsoft to support these operating systems, but an expected release date has not been announced.

Pro Tools Software Compatibility: All Pro Tools LE & TDM software **requires** compatible Digidesign hardware in order to launch. The only exception to this is Pro Tools FREE software which works in standalone mode with the Apple Sound Manager and some Sound Manager compatible third-party hardware. Pro Tools FREE for Windows 98/Me requires a sound card. See the Pro Tools FREE compatibility documents for more information.

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Get Power to burn with the latest Macs!

Go to the Apple Music & Audio website for info on upgrading your Mac audio workstation and the latest Mac audio happenings.

Pro Tools|HD Systems for Power Macintosh Requirements

Digidesign PCI Cards Supplied with System

Pro Tools | HD 1

• HD Core

Pro Tools | HD 2

- HD Core
- HD Process

Pro Tools | HD 3

- HD Core
- HD Process (2 cards)

Other Card Options

Digidesign HD Audio Interfaces (one required)

- 192 I/O
- 192 Digital I/O
- 96 I/O

Optional HD Cables - DigiSnakes & DigiLink

Digidesign Software Supplied with System

• Pro Tools 5.3

Optional Digidesign Software

Supported CPU Models & Requirements

Power Macintosh G4 (AGP graphics)

Click on the link for complete details for your specific computer

Additional Computer Requirements

System Software: Mac OS v9.1, 9.2, 9.2.1, or 9.2.2 (depending on CPU model)

Note: the use of 6 or 7 HD cards with expansion chassis requires Mac OS 9.2.2

Total System RAM:

- Minimum 256 MB
- Pro Tools application "Preferred Size" memory allocation set to 134 MB
- DAE is no longer an independent application, and therefore requires no additional RAM
- Do not change the "Minimum Size"
- Virtual memory is not supported

Additional RAM is required for:

- High edit density sessions, extensive use of plug-ins, and addition of options like MachineControl (384 MB recommended)
- Sessions larger than the default track size* - 384 MB minimum, 512

Pro Tools|HD Plug-In Finder

Optional Digidesign Hardware

- ProControl
- Fader Pack (up to 5)
- Edit Pack
- Control 24
- SYNC I/O

Optional Digidesign Audio Interfaces

Connect 1 or 2* to a single 192 I/O, 192 Digital I/O, or 96 I/O Legacy Port:

- 888 | 24 I/O
- 882 | 20 I/O

Connect all 16 channels to a single 192 I/O, 192 Digital I/O, or 96 I/O Legacy Port:

• 1622 I/O

Connect 8 channels or 16 channels* to a single 192 I/O, 192 Digital I/O, or 96 I/O Legacy Port:

- 24-Bit ADAT Bridge I/O
- * Requires "Y" cable adaptor

Supported Optional Expansion Chassis

Control Surfaces & MIDI Interfaces

Third-Party Video Capture Cards

MB recommended (Pro Tools application "Preferred" memory allocation set to 225 MB)

 * Default session sizes are 64 tracks at 44.1/48 kHz, 32 tracks at 88.2/96 kHz and 12 tracks at 176/192 kHz

Monitor, color required, minimum resolution of 1024×768

Opcode OMS v2.3.8 (supplied)

Apple QuickTime v5.0.2 (supplied)

ATTO ExpressPro-Tools v2.3.2 or higher (supplied)

Hard Drive Minimum Requirements

SCSI Acellerator Card Required

Maximum Performance Guidelines

Digidesign Compatibility Documents Index

Digidesign 2001 Junipero Serra Blvd. Daly City, CA 94014-3886 U.S.A Tel 650.731.6300 Fax 650.731.6399 Product Information United States & Canada 1.800.333.2137 North & South America 650.731.6102 (USA) Europe (England) 44.1753.658496 Asia (Japan) 81.3.3505.7963

Other Digidesign PCI Card Options - Pro Tools|HD for the Mac OS

HD Core & HD Process

Up to 7 HD cards can be used in a single ProTools | HD system

- 1 HD Core card
- Plus up to 6 HD Process cards
- Or any combination of HD Core and HD Process cards up to 7 total (Note: the use of 6 or 7 HD cards requires Mac OS 9.2.2)
- Only 4 HD cards are useable when using 176 or 192 kHz sample rates, regardless of whether an expansion chassis is used or not

For more information about expansion chassis setup and card order configurations please download the **Expanded Systems Guide** PDF in the Technical Documents Library of the Support/Tech Support section of the website.

See also Expansion Chassis Requirements - Pro Tools|HD Systems for Mac OS

Not Supported at Initial Release

Pro Tools 5.3 software does not include support for the following hardware:

- AVoption
- AVoption | XL

Digidesign plans to add support for AVoption & AVoption | XL as part of a future Pro Tools software release for Pro Tools | HD.

Other Digidesign PCI cards are not compatible with Pro Tools | HD Systems

These Digidesign PCI cards are incompatible with the new HD system. You cannot combine Pro Tools | HD and these PCI cards, either in the CPU or an expansion chassis. Doing so will cause crashes, or the CPU will simply fail to boot. The following Digidesign cards are not compatible with HD systems:

- MIX Core card
- MIX Farm card
- MIX I/O card
- d24 card (Pro Tools | 24 core card)

- DSP Farm card (Pro Tools III/Pro Tools | 24)
- Digi 001
- Audiomedia III
- Pro Tools III Disk I/O
- Pro Tools Project card
- Project II card

SampleCell II

SampleCell II Card without TDM module

The one exception is the SampleCell II card, although the TDM bus cannot be connected to the Pro Tools HD card because the SampleCell TDM Module is not compatible with Pro Tools | HD systems. SampleCell II cards can be utilized in Pro Tools | HD systems using Aux tracks to route the SampleCell I/O Analog outputs physically between the card and audio peripherals. In addition, you must install the <code>DigiSystem Init v 5.1.1</code> in your Extensions folder. (included on the Pro Tools 5.3 CD) Playback is limited to samples at 44.1 and 48 kHz.

Note: The "Getting Started with Pro Tools|HD" guide (version 5.3) that ships with HD systems with Pro Tools 5.3 incorrectly states on page 11: "Do not use SampleCell hardware cards in a Pro Tools|HD system. Doing so can result in system crashes. Instead, please use Soft SampleCell which has been specifically engineered to support 24-bit depths and higher sampling rates." Although we do recommend using Soft SampleCell with HD systems, you can use SampleCell II cards as stated above. This information will be corrected in the next document revision.

Incompatibility with older SampleCell II Cards

A rev "QC" or later of the AMCC chip is required for Blue & White G3 and G4 compatibility. This rev number appears on the AMCC chip following number "5933". Older versions can cause your computer to hang while booting or when launching Pro Tools or DigiTest. QC or higher chip is required for compatibility with the PCI 2.1 spec. Ways to identify these boards are in the grid below:

Board	S/N's Below	Manufactured Before	Board Rev Before
DSP Farm I	FF09226	7/9/97	Rev H
SampleCell II	HH02001	5/20/97	Rev D

If a customer has previously updated their board (or received a refurbished card), the serial number will remain the same, but the board rev will be updated (and the AMCC chip will have "QC" or later). Cards with the rev "Q" chip can be upgraded. Please contact Digidesign Technical Support by phone to arrange for a return authorization. Registration is required.

Note: All SampleCell II Plus cards are newer, and therefore already have the compatible

chip. (The SampleCell II Plus cards are the same as the original SampleCell II PCI cards,	but	with
the included 32 MB of RAM soldered on the card)		

Expansion Chassis Requirements - Pro Tools|HD Systems for Mac OS

Up to 7 HD cards can be used in a single ProTools | HD system

- 1 HD Core card
- Plus up to 6 HD Process cards
- Or any combination of HD Core and HD Process cards up to 7 total
- Note: the use of 6 or 7 HD cards requires Mac OS 9.2.2
- Only 4 HD cards are useable when using 176 or 192 kHz sample rates, with or without an expansion chassis

The following Expansion Chassis are officially qualified for use with Pro Tools | HD systems on the Mac OS at initial release:

13 Slot Chassis

- **Digidesign Pro Tools Expansion Chassis, 13 Slot**HD compatible models: S/N begins with NB0600100C
 HD-incompatible models: S/N = NB055300B1 or lower
- Magma 13 Slot Expansion Chassis model P13R
- Magma 13 Slot Expansion Chassis model PCI13R

Note: 13 Slot Chassis support a total of up to 10 Digidesign cards. A maximum of 7 HD cards (HD Core or HD Process) can be used in single ProTools|HD system, plus any number of SampleCell II cards. (Note: the use of 6 or 7 HD cards requires Mac OS 9.2.2)

7 Slot Chassis

- Digidesign Pro Tools Expansion Chassis, 7 Slot
- SBS (Bit3) 7 Slot Expansion Chassis model DD007-R
- Magma 7 Slot 64-bit 33MHz Expansion Chassis model P7R464

Note: Pro Tools | HD is qualified with both 32-bit and 64-bit chassis.

For further information about these products, please contact your Digidesign dealer or local Digidesign office and ask for the Digidesign Development Partner Catalog. Also available online at www.DigiDevelopers.com

For more information about expansion chassis setup and card order configurations, please download the **Expanded Systems Guide** PDF in the **Technical Documents Library** of the

Support/Tech Support section of the website.

Additional Expansion Chassis Requirements

Optional SCSI Accelerator card bundle (by Apple): For maximum track count, this configuration requires use of a qualified SCSI accelerator card. Optional SCSI accelerator cards bundled (by Apple) with Power Macintosh computers are not compatible with this configuration due to the lack of NV RAM to store Pro Tools desired SCSI transfer rate.

ATTO ExpressPro-Tools v2.3.2 or higher is required along with ATTO SCSI accelerator card, ATTO ExpressPCI Firmware v1.4.4 or higher, available at: www.digidesign.com/download/ptutil.html

Mac OS 9.2 or higher requires ATTO ExpressPro-Tools v2.7 or higher, available at: www.attotech.com/software

The use of 6 or 7 HD cards requires Mac OS 9.2.2

Further Exceptions Apply: Please refer to the "Supported CPU Models, Speeds & Requirements" list back on the Pro Tools|HD Systems for Power Macintosh Requirements page for your chosen computer.

Digidesign SampleCell II PCI Card Requirements

- SampleCell II PCI cards must be Rev D or higher (serial number HH02001 or higher) for compatibility with Expansion Chassis
- Note: the SampleCell TDM Module is not compatible with Pro Tools | HD systems
- See also: Other Digidesign PCI Card Options Pro Tools|HD for the Mac OS for more information on both of these issues regarding SampleCell II PCI cards

DigiSnakes & DigiLink —Pro Tools|HD for the Mac OS

DigiSnakes

- All DigiSnakes are 110 ohm digital grade cable (except TDIF-TDIF data cable)
- TDIF-TDIF DigiSnake is for TDIF use only. Use only on TDIF digital connectors.
- The +4/-10 Padded DigiSnake is an output-only snake for use only on the 192 I/O +4 dBU output port. You can use any other snake for the 192 I/O -10dBv input connector.
- The ProControl snake has one DB25 connector with a reversed pin-out to match the ProControl. If you use this cable with other gear, the channels will be reversed (ie channel 1 will appear on channel 8, channel 2 will appear on channel 7, etc.).
- Please use the cable bales for connector stress relief.

DigiLink

- The 100' DigiLink cable is only qualified for audio with sample rates up to 96 kHz
- To ensure signal integrity with 192 kHz sample rates, you must use 1.5' DigiLink cables between I/Os

Please note: each HD core (HD1, HD2, or HD3 system) comes with one 12' DigiLink cable, for connection of your HD I/O to the core. Each HD I/O comes with one 1.5' DigiLink cable, intended for chaining a second HD I/O to the first HD I/O via the expansion port. The HD system is limited to one additional HD I/O attached to the expansion port of a first. Given this, if you have three, five, or seven HD I/O's, you most likely will want to purchase an additional one, two, or three 12' (or longer) DigiLink cables to connect to HD Process Cards.

For more information on Pro Tools|HD cables, see the DigiLink, DigiSnake, and DigiSnake Kits FAQ in the Support section of the website.

Optional Digidesign Software - Pro Tools|HD Systems

Note: A Digidesign-qualified external diskette drive (USB floppy drive) is required for most software installations when used with qualified Apple Powermac G4 (AGP)models. Exceptions such as serial or iLok license card authorization are pointed out below.

- Access Virus v1.2 iLok
- Aphex Aural Exciter v2.0 iLok
- Aphex Big Bottom Pro v2.0 iLok
- Bruno/Reso v1.3 iLok
- **DINR** v3.5 Broadband Noise Reduction-AS & Broadband Noise Reduction-TDM. (the HUM Removal-TDM component of DINR is not supported) iLok
- **DPP-1** v1.8 serial authorization
- **D-Fi** v1.6
- **D-fx** v1.4
- DrawmerDynamics v2.1
- Focusrite d2 v1.7
- Focusrite d3 v1.5
- Line 6 Amp Farm v2.0 [update from 1.5] iLok
- MachineControl v1.0.1 [additional information]
- MasterList CD v2.4 [additional information]
- Maxim v1.4
- **MP3 Option** v1.2 serial authorization, download-only, available from the DigiStore [additional information & updates]
- Reverb One v1.2 iLok
- **SampleCell Editor** v3.1 (w/ SampleCell II Plus) [update from v3.0] no authorization required
- Soft SampleCell v3.1 [additional information] [update from v3.0]
- SoundReplacer v1.3
- SurroundScope v1.1

For a complete list of plug-ins from Digidesign & Digidesign Development Partners, see the Pro Tools | HD Plug-In Finder in the Products section of the website.

Qualified External Floppy Diskette Drives

Although not required with Pro Tools installation, a Digidesign-qualified external floppy diskette drive (USB floppy drive) may be required for installation of some Plug-Ins and optional software applications when used with Macintosh Blue & White G3, G4, or PowerBook models. (see the *Optional Digidesign Software* links on the main compatibility page for each Pro Tools system)

The following external USB diskette drives are currently supported:

- Imation SuperDisk
- NewerTechnology uDrive
- SmartDisk (VST) Floppy Drive (model FDUSB-M) Note: Information on VST brand products from SmartDisk can be found at: www.smartdisk.com

Links to software and drivers are available in the Digidesign Support/Downloads/Utilities Section:

- SmartDisk (VST) Floppy Drive (model FDUSB-M)
- Imation SuperDisk
- NewerTechnology uDrive
- PACE USB Floppy Enabler

Apple's revised USB support allows for booting from a USB drive, therefore you should not boot up your system with an authorization disk inserted in the USB Drive.

MachineControl with Pro Tools|HD Systems for Mac OS

Digidesign's MachineControl option is officially supported with the Pro Tools|HD system. Remote deck emulation mode is available for use with the following controllers:

- Soundmaster ION/ATOM
- Colin Broad SR4
- Timeline Microlynx
- Timeline KCU, Lynx, Lynx2

Note: MachineControl's 9-pin remote deck emulation mode does not work via the serial port on the SYNC I/O or the serial ports of the HD Core and Process cards. In order to use the 9-pin remote deck emulation with Pro Tools|HD, you must connect the remote controller to your Pro Tools system with a modem-to-serial port or USB-to-serial port adapter.

Digidesign currently supports the GeeThree Stealth Port for G4 - AGP Video (Sawtooth), Stealth Port for Dual Processor G4s or Griffin gPort II installed in the modem port of the G4.

When using the GeeThree products, version 1.0.3 or higher of the Stealth Port extension is required, available here: www.geethree.com/download.html

For USB-to-serial conversion, Digidesign qualifies the Keyspan USA-28x USB-to-Serial adapter with driver v1.72 or higher, available at: http://www.keyspan.com/downloads/

MasterList CD Version 2.4 Requirements

Computer Requirements

MasterList CD version 2.4 is a Mac OS product which is qualified to run on any Power Macintosh computer listed in these Digidesign Product Compatibility Documents, with 8 MB of RAM dedicated to the MasterList CD application.

External Diskette Drive Requirements

A Digidesign-qualified external diskette drive (USB floppy drive) is required for installation of MasterList CD when used with Macintosh Blue & White G3 or G4models.

SCSI HBA Requirements

Use of MasterList CD with Blue & White G3 or G4 computers requires a SCSI HBA card (due to lack of internal SCSI bus). Supported SCSI HBA cards are the same as those supported with Pro Tools systems listed in these Digidesign Product Compatibility Documents.

Hard Drive Requirements

Digidesign qualified dedicated SCSI hard disk with an access time of 18 ms or faster, and non-thermal recalibrating during read/write operations.

CD Recorder Requirements

Compatible Macintosh SCSI-based CD Recorder

Note: In order for a CD recorder to work with MasterList CD, support for the specific model must be built into the MasterList CD application. Only the SCSI devices from the following list will work with MasterList CD version 2.4:

- Hewlett Packard SureStore 6020i/6020es
- Hewlett Packard CD R 4020i
- JVC XRW-2010
- JVC XR-W2001/S201
- Kodak PCD-225
- Marantz CDR-620
- Philips CDD-2600
- Philips CDD-2000
- Philips CDD-522
- Pinnacle Micro RCD-5040
- Pinnacle Micro RCD-1000
- Pinnacle Micro RCD-5020
- Plextor PlexWriter 12/10/32S
- Plextor CD-R PXW124T
- Plextor CD-R PX-W8220T
- Plextor CD-R PX-W4220T
- Plextor CD-R PX-R820T
- Ricoh MP6201
- Ricoh MP6200S
- Ricoh 1420-C
- Ricoh RS1060-C
- Sony 948S/X
- Sony CSP 940S/9411S/CDU 924S
- Sony CSP-920S/9211S
- Sony CDW-900E
- Studer D741

- Teac CR-R58S
- Teac CR-R56S
- Yamaha CRW2100SXZ
- Yamaha CRW8824S
- Yamaha CRW8424S
- Yamaha CRW 6416S
- Yamaha CRW4260T
- Yamaha CRW4416S
- Yamaha CDR400AT/400t/400c
- Yamaha CDE-100
- Yamaha CDE-102

For specifications and further details regarding individual burners and their use with MasterList CD, see the MasterList CD Compatible CD Recorders Specification Grid

Supported Digidesign Systems for optional higher quality analog and digital output:

- Pro Tools | HD1, HD2 & HD3
- Pro Tools | 24 MIX, MIXplus & MIX³
- Pro Tools | 24 additional information
- Pro Tools III additional information
- Digi 001
- Audiomedia III additional information

DAE & DSI optional

When a Digidesign system is used for higher quality output monitoring, MasterList CD v2.4 requires DAE 5.0.1 or higher, DigiSystem INIT 5.0.1 or higher & the Direct I/O 5.0.1 or higher extensions. These files are installed by the MasterList CD CD-ROM installer, MLCD 2.4 web update installer, or Pro Tools 5.0.1 or higher installer.

Soft SampleCell™

Supported Mac OS:

- 9.0.4
- 9.1
- 9.2

Supported CPUs:

- Macintosh Desktop Blue & White G3, all models (Beige G3 NOT supported)
- Macintosh Desktop G4, all models

Installation & Authorization

Soft SampleCell 3.1 ships with a floppy disk authorization and an iLok license card. Installation requires one of the following:

An iLok USB Smart Key, included with all Pro Tools | HD core systems or sold separately
at Digidesign Dealers, the DigiStore, or see the "Where to Buy" section at www.ilok.com

Or if you do not have an iLok:

• A qualified external diskette drive (floppy drive) to install the key disk authorization

Required for use with DirectConnect:

Pro Tools | HD

• Soft SampleCell 3.1 update available at www.digidesign.com/download/softsc.html

Pro Tools TDM

- Pro Tools version 5.1 or higher software for Macintosh
- Mac OS-based Pro Tools|24 MIX system (original Pro Tools|24 allows using DirectConnect as part of the new "RTAS on disk tracks" feature in Pro Tools v5.1 or higher only)
- DirectConnect requires one free SRAM chip on a MIX system (there are 3 SRAM chips on each MIX card.)

Pro Tools LE

- Pro Tools LE version 5.1 or higher software for Macintosh
- Mac OS-based Pro Tools LE system (Audiomedia III, ToolBox XP, Digi 001 hardware)

More Information:

• Product Specification Sheet





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Power Macintosh G4 (AGP Graphics) - Pro Tools|HD Requirements

Apple G4 (AGP Graphics) Computers Supported:

Single Processor	Dual Processor *
350 MHz Power Mac G4	Dual 450 MHz Power Mac G4
400 MHz Power Mac G4	Dual 500 MHz Power Mac G4
450 MHz Power Mac G4	Dual 533 MHz Power Mac G4
466 MHz Power Mac G4	Dual 800 MHz Power Mac G4
500 MHz Power Mac G4	Dual 1 GHz Power Mac G4
533 MHz Power Mac G4	
667 MHz Power Mac G4	
733 MHz Power Mac G4 **	
800 MHz Power Mac G4	
867 MHz Power Mac G4	
933 MHz Power Mac G4	

^{*} Pro Tools currently does not utilize the second processor in Apple Dual Processor CPUs. If problems (such as -6042 errors) occur when using Pro Tools on a Dual Processor CPU,

Digidesign recommends the following: Move the folder named "Multiprocessing" from the System Folder "Extensions" folder to the "Extensions (Disabled)" folder and restart.

**Both models: early 733 with level 3 cache and Quicksilver 733 without level 3 cache.

Additional Information

- See the Digidesign 2001 & 2002 G4 Qualification Summary for additional details on newest models.
- See Apple's tech archive on how to differentiate between AGP Graphics and PCI Graphics G4 models at: http://www.info.apple.com/kbnum/n58418
- For current Apple computer models and specifications, see www.apple.com
- For other Apple computers and specifications, see www.everymac.com and www.applespec.com

Additional Requirements

Mac OS 9.1 or 9.2.x (Quicksilver models) required

- 5-slot 466 MHz, 533 MHz, 667 MHz, and 733 MHz (733 with level 3 cache) models require Mac OS 9.1 (pre-installed)
- Quicksilver 733 MHz (without level 3 cache), 867MHz, and Dual 800 MHz models require Mac OS 9.2, 9.2.1, or 9.2.2 (pre-installed)

ATTO ExpressPro-Tools v2.3.2 or higher required (supplied on Pro Tools v5.3 CD-ROM)

Note: Mac OS 9.2 requires ATTO ExpressPro-Tools v2.7 or higher, available at: www.attotech.com/software/

The use of 6 or 7 HD cards with expansion chassis requires Mac OS 9.2.2

External Floppy Diskette Drive

Although not required with Pro Tools installation, an external floppy diskette drive may be required for some Plug-Ins installations. The following external USB diskette drives are currently supported:

- Imation SuperDisk
- NewerTechnology uDrive
- SmartDisk (VST) Floppy Drive (model FDUSB-M) Note: Information on VST brand products from SmartDisk can be found at: www.smartdisk.com

Links to software and drivers are available in the Digidesign Support/Downloads/Utilities Section:

- SmartDisk (VST) Floppy Drive (model FDUSB-M)
- Imation SuperDisk
- NewerTechnology uDrive
- PACE USB Floppy Enabler

Apple's revised USB support allows for booting from a USB drive, therefore you should not boot up your system with an authorization disk inserted in the USB Drive.

SCSI Accelerator Card

For maximum track count, the G4 requires the use of a qualified SCSI HBA card. Optional SCSI HBA cards bundled by Apple with Power Macintosh computers are not compatible with this configuration due to the lack of NV RAM to store Pro Tools desired SCSI transfer rate. The following SCSI HBA card is qualified with the G4 models listed at the top of this page:

ATTO ExpressPCI SCSI HBA card EPCI-DC (ExpressPCI Dual Channel Ultra/WIDE HBA, also available in the Digidesign SCSI64 Kit) with the following requirements:

- ATTO ExpressPCI Firmware v1.4.4 or higher, available at: www.digidesign.com/download/ptutil.html
- ATTO ExpressPro-Tools v2.3.2 (supplied on Pro Tools v5.3 installation CD-ROM) or higher with Synch Transfer Rate set to 20 (10) and PCI Burst Rate set to 32 bytes
- **Note:** Mac OS 9.2 requires ATTO ExpressPro-Tools v2.7 or higher, available at: www.attotech.com/software

MIDI Interface

Digidesign supports the following MIDI Interfaces for use with Pro Tools version 5.3:

- Digidesign MIDI I/O (not yet shipping)
- Emagic Unitor8
- Emagic AMT8
- MOTU MTP AV
- Opcode Studio 64XTC

Both USB and serial MIDI interfaces work effectively with Pro Tools. Serial MIDI interfaces require either a Mac serial port or a qualified modem-to-serial port adapter. Digidesign currently supports the GeeThree Stealth Port for G4 - AGP Video (Sawtooth), Stealth Port for Dual Processor G4s or Griffin g4Port installed in the modem port (thereby not using a PCI slot).

When using the GeeThree products, version 1.0.3 or higher of the Stealth Port extension is required, available here: www.geethree.com/download.html

Dual Monitor AGP Graphics Cards

- Appian Jeronimo[™]2000 Macintosh (with version 1.4.1 drivers and the included firmware update. additional notes)
- ProMax DH-Max (disable ProMax drivers when using with Pro Tools. Both monitors set to "thousands of colors" instead of 256. Not yet qualified with 13-slot chassis)
- NVIDIA GeForce4 MX (as shipped from Apple standard on the 933 MHz & Dual 1 GHz Power Mac G4 models)
- ATI Radeon 7500 (as shipped from Apple standard on the 800 MHz Power Mac G4)

Note: As of March 2002, the upcoming NVIDIA GeForce4 Titanium built-to-order option from Apple not yet shipping or tested.

* ProMax DH-Max Notes: Occasionally when booting a system with the ProMax DH-Max dual monitor card, the top portion of the monitors are black, the apple menu bar appears in the middle of the screen, the bottom portion of the desktop is unreachable, or the desktop may be offset to one side. A reboot will usually solve this problem. Otherwise, you can open the Monitor control panel and rearrange the monitors.

Known Issues:

Not Supported at Initial Release

Pro Tools 5.3 software does not include support for the following features and options.

- Features and fixes added in Pro Tools 5.1.3
- Unity MediaNet Shared Storage Systems
- AVoption and AVoption | XL
- DigiStudio internet collaboration
- DigiTranslator 2.0
- PostConform

Digidesign plans to add support for each of the above items as part of a future Pro Tools software release for Pro Tools | HD.

Other Digidesign PCI cards are not compatible with Pro Tools | HD Systems

Previous Digidesign PCI cards are incompatible with the new HD system. You cannot combine Pro Tools | HD and these PCI cards, either in the CPU or an expansion chassis. Doing so will cause crashes, or the CPU will simply fail to boot. The following Digidesign cards are not compatible with HD systems:

- MIX Core card
- MIX Farm card
- MIX I/O card
- d24 card (Pro Tools | 24 core card)
- DSP Farm card (Pro Tools III/Pro Tools 24)
- Digi 001
- Audiomedia III
- Pro Tools III Disk I/O
- Pro Tools Project card
- Project II card

The use of 6 or 7 HD cards with expansion chassis requires Mac OS 9.2.2

SampleCell II Card without TDM module

The one exception is the SampleCell II card, although the TDM bus cannot be connected to the Pro Tools HD card because the SampleCell TDM Module is not compatible with Pro Tools | HD systems. SampleCell II cards can be utilized in Pro Tools | HD systems using Aux tracks to route the SampleCell I/O Analog outputs physically between the card and audio peripherals. In addition, you must install the DigiSystem Init v 5.1.1 in your Extensions folder. (included on the Pro Tools 5.3 CD) Playback is limited to samples at 44.1 and 48 kHz. For more information, see Other Card Options

The following Digidesign hardware is not compatible with Pro Tools \mid HD systems:

- Universal Slave Driver
- Video Slave Driver
- SMPTE Slave Driver
- SampleCell II TDM Module





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2001 & 2002 G4 "Quicksilver" Model Qualification

Digidesign 2002 G4 Qualification

see also 2001 G4 Qualification

Status Report - March 2002

Qualification Announcement For Apple's 2002 Power Mac G4 (Quicksilver) Desktop Models

- 800 MHz Power Mac G4
- 933 MHz Power Mac G4
- Dual 1 GHz Power Mac G4

Apple's Latest Power Mac G4 models have officially been qualified by Digidesign for use with the products listed below. Additional Computer Requirements, (System RAM, etc.,) as listed on the Digidesign Compatibility Documents remain the same, with the exception of Mac OS as detailed in the following section.

Known Issues:

- 1. The "Quicksilver" 2002 G4 models require Mac OS 9.2.2 to run Pro Tools. Users should not attempt to install OS 9.1, or run OSX, (including Classic mode), with Pro Tools on these machines. The Quicksilver G4 models have been tested with the Mac OS as shippped from Apple on these machines, with a dual boot system which includes both OS 9.2.2 and OS X. Although you cannot use Pro Tools with OS X, it is not necessary to remove OS X from these computers.
- 2. Whenever updating any operating system, particularly if you are updating Mac OS X for use with other applications, it is recommended that you remove any plug-in key disk authorizations and store them on the floppy disk before upating or installing the Mac OS. After updating the OS, you can then re-install the key disk authorizations after first booting in OS 9.
- 3. Pro Tools currently does not utilize the second processor in dual processor Power Mac G4 models. If problems (such as -6042 errors) occur when using Pro Tools on one of these machines, Digidesign recommends the following: Move the folder named "Multiprocessing" from the System Folder "Extensions" folder to the "Extensions"

(Disabled)" folder and restart.

4. The current version of DigiTest does not yet recognize the 2002 models because of their newer graphics cards and will give an incorrect error message that your system is misconfigured (even though it is configured correctly). Follow the instructions to continue past the error message to have DigiTest analyze your Digidesign cards.

The following have been qualified on Apple's Latest Power Macintosh Desktop G4 800 MHz, 933 MHz, and Dual 1 GHz models:

Pro Tools Software

- Pro Tools 5.3 (for Pro Tools | HD)
- Pro Tools 5.1.3
- Pro Tools 5.2 (for DigiStudio)
- Pro Tools 5.1.1
- Pro Tools LE 5.2 (for Mbox)
- Pro Tools LE 5.1.1

Mac OS

- Mac OS 9.2.2
- European Language Mac OS

Pro Tools Systems

- Pro Tools® | HD1
- Pro Tools® | HD2
- Pro Tools® HD3
- Pro Tools® 24 MIX
- Pro Tools® 24 MIXplus
- Pro Tools® | 24 MIX³
- Pro Tools® 24
- Digi 001™
- Mbox

Optional PCI Cards

- HD Process
- MIX Farm™
- MIX I/O
- DSP Farm
- SampleCell II[™] Plus (the use of multiple SampleCell II cards in 2001 & 2002 G4 models requires Pro Tools 5.1.1 or higher)
- SampleCell[™] TDM Module (Pro Tools|24 & MIX only. Not compatibile with Pro Tools|HD systems)

I/O Interfaces

- 192 I/O™
- 192 Digital I/O™
- 96 I/O™
- 888 | 24 I/O™

- 888 I/OTM
- 882 | 20 I/O™
- 882 I/O™
- 24-bit ADAT Bridge I/O™
- 1622 I/O™

Expansion Chassis

- Pro Tools® 13-Slot Expansion Chassis
- Pro Tools® 7-Slot Expansion Chassis
- SBS 13-slot Expansion Chassis
- Magma 7-slot P7R-D1

Optional Digidesign Hardware

- AVoption
- AVoption | XL
- Control24[™]
- Edit Pack™ (requires Pro Tools 5.1 or higher)
- Motor Mix (1.0.8)
- ProControl® with up to 5 Fader Pack™ units (5 Fader Packs require Pro Tools 5.1 or higher)
- Sync I/O (qualified with Pro Tools | HD with Pro Tools 5.3)
- Universal Slave Driver (USD™)

Optional Digidesign Software

- Avid Drive Utility
- DigiTranslator[™]
- FilmFrame[™] (24P)
- MachineControl[™]
- MasterList CD™
- Optional Digidesign® Plug-Ins
- PostConform®
- Soft SampleCell™

Storage

- DigiDrive® SCSI Drives
- DigiDrive® FireWire 80
- Digidesign SCSI64 Kit
- ATTO EPCI-DC SCSI card
- ATTO ExpressPro Tools disk utility v2.7 or higher, available at: www.attotech.com/software

MIDI Interfaces

- MOTU Fastlane (USB)
- Opcode MIDIport32 2x2 (USB)
- AMT8 (USB/Serial)
- Digi 001 MIDI ports (with Pro Tools LE only)

Dual Monitor AGP Graphics Cards

- Appian Jeronimo[™]2000 Macintosh (with version 1.4.1 drivers and the included firmware update. additional notes)
- ProMax DH-Max (disable ProMax drivers when using with Pro Tools. Both monitors set to "thousands of colors" instead of 256. Not yet qualified with 13-slot chassis)
- NVIDIA GeForce4 MX (as shipped from Apple standard on the 933 MHz & Dual 1 GHz Power Mac G4 models)
- ATI Radeon 7500 (as shipped from Apple standard on the 800 MHz Power Mac G4)

Note: As of March 2002, the upcoming NVIDIA GeForce4 Titanium built-to-order option from Apple not yet shipping or tested.

* ProMax DH-Max Notes: Occasionally when booting a system with the ProMax DH-Max dual monitor card, the top portion of the monitors are black, the apple menu bar appears in the middle of the screen, the bottom portion of the desktop is unreachable, or the desktop may be offset to one side. A reboot will usually solve this problem. Otherwise, you can open the Monitor control panel and rearrange the monitors.

Additional Third-Party Hardware & Software:

- Aurora Fuse (video capture card, requires v2.0.2 drivers)
- Mackie HUI (Control Surface)
- Peavey PC 1600 (Control Surface)
- PACE iLok
- Imation Superdisk (USB floppy Drive)
- Newer Technology uDrive (USB floppy Drive)
- SmartDisk USB Floppy Drive (FDUSB-M) (same as VST USB Floppy Drive)
- GeeThree Stealth Port (not yet qualified with Machine Control or 13-slot chassis)
- Griffin Technology g4Port
- Keyspan USA28x® (for use with MachineControl, not compatible with MIDI devices)

Full compatibility testing was performed with Pro Tools® 5.1.1 and higher.

For current Apple computer models and specifications, see www.apple.com

For other Apple computers and specifications, see www.everymac.com and www.applespec.com

Digidesign Compatibility Documents Index

Digidesign 2001 G4 Qualification —October 2001

See also 2002 G4 Qualification

Notes:

Does not contain information on Pro Tools|HD or Mbox systems, both released in 2002, or the single processor 800 MHz Power Mac G4, 933 MHz Power Mac G4, and Dual 1-GHz PowerPC G4 models at the top of this page.

Status Report - October 4, 2001

Qualification Announcement For Apple's 2001 Power Mac G4 (Quicksilver)

- 733 MHz Power Mac G4 (2nd generation, does not have level 3 cache)
- 867 MHz Power Mac G4
- Dual 800 MHz Power Mac G4

Apple's Latest Power Mac G4 models have officially been qualified by Digidesign for use with the products listed below. Additional Computer Requirements, (System RAM, etc.,) as listed on the Digidesign Compatibility Documents remain the same, with the exception of Mac OS as detailed in the following section.

Known Issues:

- 1. The "Quicksilver" G4 models require Mac OS 9.2, 9.2.1 or 9.2.2 to run Pro Tools. Users should not attempt to install OS 9.1, or run OSX, (including Classic mode), with Pro Tools on these machines. The Quicksilver G4 models have been tested with the Mac OS as shippped from Apple on these machines, with a dual boot system which includes both OS 9.2.x and OS X. Although you cannot use Pro Tools with OS X, it is not necessary to remove OS X from these computers. *
- 2. Pro Tools currently does not utilize the second processor in dual processor Power Mac G4 models. If problems (such as -6042 errors) occur when using Pro Tools on one of these machines, Digidesign recommends the following: Move the folder named "Multiprocessing" from the System Folder "Extensions" folder to the "Extensions (Disabled)" folder and restart.
- 3. When running DigiTest v5.1.1 on the 867 MHz and 800 MHz dual-processor models, DigiTest reports a configuration problem if the ATTO Express PCI DC is installed. An erroneous error occurs when it scans the ATTO Express PCI DC (SCSI HBA card), however the card passes if you continue the test. This problem does not occur when running DigiTest on the 733 MHz model.
- 4. On some G4 models running Mac OS 9.2, 9.2.1 or 9.2.2, graphics in the Fades window may appear in the wrong color, or the fade lines may be invisible. Clicking outside the Fade window causes the window to redraw with the correct colors.

The following have been qualified on Apple's Latest Power Macintosh Desktop G4 733 MHz, 867 MHz, and Dual 800 MHz models:

^{*} Additional Mac OS Notes: Mac OS 9.2 and 9.2.1 have only been tested with the Quicksilver G4 models. Earlier models that do not require OS 9.2 have not been tested for compatibility with Mac OS 9.2 or higher. In addition, you should not install OS X on the same partition or hard drive with Mac OS 9.x that you use as your startup drive for Pro Tools on pre-Quicksilver G4 models.

- Pro Tools® | 24 MIX
- Pro Tools® | 24 MIXplus
- Pro Tools® |24 MIX³
- Pro Tools® |24
- Digi 001™
- Digi ToolBox™ XP (Audiomedia III)

Optional PCI Cards

- MIX Farm™
- MIX I/O
- DSP Farm
- SampleCell II[™] Plus (the use of multiple SampleCell II cards in 2001 G4 models requires Pro Tools 5.1.1)
- SampleCell™ TDM Module

I/O Interfaces

- 888 | 24 I/O™
- 888 I/O™
- 882 | 20 I/O™
- 882 I/O™
- 24-bit ADAT Bridge I/O™
- 1622 I/O™

Expansion Chassis

- Pro Tools® 13-Slot Expansion Chassis
- Pro Tools® 7-Slot Expansion Chassis
- Magma 7-slot P7R-D1
- SBS 13-slot Expansion Chassis

Optional Digidesign Hardware

- AVoption | XL
- AVoption
- ProControl® with up to 5 Fader Pack™ units (5 Fader Packs require Pro Tools 5.1 or higher)
- Edit Pack™ (requires Pro Tools 5.1 or higher)
- Control | 24[™] (requires Pro Tools 5.1 or higher)
- Motor Mix (1.0.8), HUI, PC 1600
- Universal Slave Driver (USD™)
- Video Slave Driver (VSD™)
- SMPTE Slave Driver (SSD™, discontinued)

Optional Digidesign Software

- Soft SampleCell[™]
- Optional Digidesign® Plug-Ins
- MasterList CD™
- MachineControl[™]
- DigiTranslator™
- PostConform®
- FilmFrame™

Storage

- DigiDrive® 9|10k, 18|10k, 36|10k
- ATTO ExpressPro Tools disk utility (Note: Mac OS 9.2 requires ATTO ExpressPro-Tools v2.7 or higher, available at: http://www.attotech.com/software/)
- ATTO EPCI-DC SCSI HBA card (SCSI64 Kit)
- ATTO EPCI-UL2D SCSI HBA card for AVoptionXL video storage
- Adaptec 2906 SCSI HBA (for LE systems only)

MIDI Interfaces

- MOTU Fastlane (USB)
- MIDIport32 2x2 (USB)
- AMT8 (USB/Serial)
- Digi 001 MIDI ports (with Pro Tools LE only)

Additional Third-Party Hardware & Software:

- Griffin g4Port
- Stealth Port, by GeeThree (new version)
- Appian Jeronimo 2000
- Imation Superdisk
- Newer Technology uDrive
- VST USB Floppy Drive (FDUSB-M)
- Aurora Fuse (with v2.0.2 drivers)
- Keyspan USA28x®

Information on how to differentiate between G4 models can be found on Apple's website here: http://www.info.apple.com/kbnum/n58418

For current Apple computer models and specifications, see www.apple.com

For other Apple computers and specifications, see www.everymac.com and www.applespec.com

Full compatibility testing was performed with Pro Tools® 5.1.1 and higher

Status Report —Previously Completed

Digidesign[®] currently supports the following Apple 4 PCI slot 2001 G4 Models. Full compatibility testing was performed with Pro Tools[®] 5.1 and higher.

Testing Completed With the Following Computers:

466 MHz Power Mac G4 **533 MHz Power Mac G4**

Dual 533 MHz Power Mac G4

667 MHz Power Mac G4 **733 MHz Power Mac G4**

(1st generation, with 1 MB backside level 3 cache)

Qualification limited to the following products:

- Pro Tools® 5.1 or higher software running on Mac OS v9.1
- Pro Tools® | 24 MIX
- Pro Tools® | 24 MIXplus
- MIX Farm™
- MIX I/O
- Pro Tools® |24
- DSP Farm™ (Merle II)
- AVoption
- AVoption | XL
- 888 | 24 I/O™
- 888 I/OTM
- 882 | 20 I/O™
- 882 I/O™
- 24-Bit ADAT Bridge I/O™
- 1622 I/O™
- ProControl[®]
- ProControl[®] with 5 Fader Pack[™] units (requires Pro Tools 5.1 or higher)

- SBS 13-slot Expansion Chassis
- SBS 13-slot Expansion Chassis with AVoption
- ATTO ExpressPro Tools disk utility Note: Mac OS 9.2 requires ATTO ExpressPro-Tools v2.7 or higher, available at: http://www.attotech.com/software
- ATTO EPCI-DC SCSI HBA card (SCSI64 Kit)
- ATTO EPCI-UL2D SCSI HBA card for AVoptionXL video storage
- Adaptec 2906 SCSI HBA (for LE systems only)
- Griffin g4Port
- Stealth Port, by GeeThree (new version)
- Keyspan USA28x®
- Motor Mix (1.0.8), HUI, PC 1600
- Appian Jeronimo 2000
- Aurora Fuse (with v2.0.2 drivers)
- Imation Superdisk
- AMT8 (USB/Serial)



- Control | 24[™] (requires Pro Tools 5.1 or higher)
- Universal Slave Driver (USD™)
- SampleCell II[™] Plus (the use of multiple SampleCell II cards in 2001 G4 models requires Pro Tools 5.1.1)
- SampleCell™ TDM Module
- Soft SampleCell™
- Digi 001™
- Digi ToolBox™ XP (Audiomedia III)
- Optional Digidesign® Plug-Ins
- MasterList CD™
- DigiTranslator™
- MachineControl[™]
- PostConform[®]
- FilmFrame™
- Pro Tools® 13-Slot Expansion Chassis
- Pro Tools® 7-Slot Expansion Chassis
- DigiDrive® 9|10k, 18|10k, 36|10k

• Digi 001 MIDI ports (with Pro Tools LE only)





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Mac OS Requirements —Pro Tools v5.3

Approved Mac Operating Systems

- Pro Tools | HD systems with Pro Tools version 5.3 has been tested and approved on all PowerMac G4 AGP models with Mac OS 9.1, 9.2, 9.2.1, and 9.2.2.
- Apple Power Mac G4 AGP models (AGP graphics slot + 4 PCI slots = 5 slots total) require Mac OS 9.1 on the early addition 5 slot models or Mac OS 9.2 on the "Quicksilver" 5 slot models.
- Please see additional Mac OS notes below under Known Issues

Settings & Requirements

- Mac OS Base Extension set
- Pro Tools 5.3 installed software and System extensions
- OMS 2.3.8 (supplied on Pro Tools CD)
- QuickTime 5.0.2 (supplied on Pro Tools CD)
- Set default cache (in the Memory Control Panel) to "Custom, 512k"
- Set Energy Saver Control Panel to "Never"
- In the Appearance Control Panel, disable "Smooth All Fonts On Screen" and change system font to other than "Charcoal"
- When using Digidesign Control Panel, turn off Platinum Sounds in the Appearance Control Panel
- If Norton Utilities is used it must be Norton Utilities v4.0 or higher to ensure compatibility with HFS+

Known Issues:

- 1. The "Quicksilver" G4 models require OS 9.2, 9.2.1, or 9.2.2 to run Pro Tools. Users should not attempt to install OS 9.1, or run OSX, (including Classic mode), with Pro Tools on these machines. The Quicksilver G4 models have been tested with the Mac OS as shippped from Apple on these machines, with a dual boot system which includes both OS 9.2.x and OS X. It is absolutely necessary to boot from OS 9.2.x in order to run Pro Tools. Although you cannot use Pro Tools with OS X or in "Classic" mode under OS X, it is not necessary to remove OS X from these "Quicksilver" G4 computers.
- 2. Additional Mac OS Notes: Mac OS 9.2, 9.2.1, and 9.2.2 have only been tested with the Quicksilver G4 models. Earlier models that do not require OS 9.2 have not been tested for compatibility with Mac OS 9.2 or higher. In addition, **you should not install OS X**

on the same partition or hard drive with Mac OS 9.x that you use as your startup drive for Pro Tools on pre-Quicksilver G4 models.

- 3. **Pro Tools currently does not utilize the second processor in dual processor Power Mac G4 models**. If problems (such as -6042 errors) occur when using Pro Tools on one of these machines, Digidesign recommends the following: Move the folder named "Multiprocessing" from the System Folder "Extensions" folder to the "Extensions (Disabled)" folder and restart.
- 4. On some G4 models running OS 9.2, 9.2.1 or 9.2.2, graphics in the Fades window may appear in the wrong color, or the fade lines may be invisible. Clicking outside the Fade window causes the window to redraw with the correct colors.
- 5. The use of 6 or 7 HD cards with expansion chassis requires Mac OS 9.2.2

See Apple's tech archive on how to differentiate between AGP Graphics and PCI Graphics G4 models at: www.info.apple.com/kbnum/n58418

Power Macintosh G4 version history and specifications are available at www.everymac.com and www.applespec.com

Control Surfaces & MIDI Interfaces with Pro Tools HD Systems for Mac OS

Control Surfaces

Digidesign supports the following control surfaces for use with Pro Tools | HD systems & Pro Tools version 5.3 software:

- ProControl (with up to 5 Fader Packs and an Edit Pack)
- Control 24

CM Automation's Motor Mix, the Mackie HUI Controller, JL Cooper CS-10 (MIDI model), and the Peavey PC-1600 have not yet been tested with Pro Tools|HD systems

MIDI Interfaces

Digidesign supports the following MIDI Interfaces for use with Pro Tools | HD systems & Pro Tools version 5.3 software:

- Digidesign MIDI I/O (not yet shipping)
- Emagic Unitor8
- Emagic AMT8
- MOTU MTP AV
- Opcode Studio 64XTC

Both USB and serial MIDI interfaces work effectively with Pro Tools. Serial MIDI interfaces require either a Mac serial port or a qualified modem-to-serial port adapter. Digidesign currently supports the GeeThree Stealth Port for G4 - AGP Video (Sawtooth), Stealth Port for Dual Processor G4s or Griffin gPort II installed in the modem port (thereby not using a PCI slot).

When using the GeeThree products, version 1.0.3 or higher of the Stealth Port extension is required, available here: www.geethree.com/download.html



Third-Party Video Capture Cards

The following third-party video capture card has been tested for use with Pro Tools \mid HD systems with Pro Tools 5.3 and higher:

• Aurora Fuse – Aurora Fuse drivers 2.0.2 or higher required. These drivers are available for free download from the Digidesign Support/Downloads/Utilities & Links

Pro Tools|HD Hard Drive Minimum Requirements

Minimum Drive Requirements

- SCSI interface: Wide single-ended or low-voltage differential (LVD or Ultra 160)
- Disk drive rotational speed: 7200 RPM or faster
- Buffer Size: 512K or larger
- Drives must be dedicated for audio (internal or external)
- Mac OS file system: HFS or HFS+. Drives should be initialized with ATTO ExpressPro-Tools v2.3.2 or higher, available at: http://www.attotech.com/software/
- Note: Mac OS 9.2 requires ATTO ExpressPro-Tools v2.7 or higher, available at: http://www.attotech.com/software/
- If using non-ATTO ExpressPro-Tools initialized drives, click here for options

Hard Drive Families from the following Manufacturers are recommended:

Manufacturers	Drive Families
Digidesign	DigiDrive*
Avid	rS, iS Plus, iS Pro
Seagate	Cheetah, Barracuda
IBM	Ultrastar

^{*} First generation DigiDrives are not supported in LVD mode

To check supported SCSI HBA cards for specific Mac computer models, click here.

Notes

- Pro Tools has a single audio file size limit of 2048MB, even when used with Mac OS 9.x and the HFS+ file system. This equates to about 4.5 hours at 24-bit, 44.1 kHz.
- High Speed Drives require manufacturer-approved enclosure to ensure correct heat dissipation, required for sustained drive reliability

Storage

Approximate Storage Consumption (Megabytes per Minute per Track):

Sample Rate: (kHz)	44.1	48	96	192
16-Bit	5	5.5	11	22
24-Bit	7.5	8	16	32

As with all Pro Tools systems, drive performance depends on a number of factors, including track count, edit density, and the use of crossfades or processing like Beat Detective. For sessions with high edit density, we recommend the following configurations. Testing has been conducted using Digidesign's DigiDrives. Performance with other drives may vary.

SCSI Drives—Approximate Track Counts:

SCSI Drives	44.1/48 kHz	96 kHz	192 kHz (No Chassis)	192 kHz (With Chassis)
4	128	64	24	16
2	64	32	12	12
1	32	16	6	6

IDE/ATA Hard Drives

IDE/ATA drives meeting the requirements at this link are qualified with Pro Tools|HD systems in the following approximate track count:

• 1 drive for up to 32 tracks at 44.1/48 kHz

Firewire Hard Drives

The DigiDrive FireWire 80 has been qualified with Pro Tools | HD systems for the following:

- Supported track count (per drive): 24 tracks per drive at 48 KHz/24-bit @ 500ms edit density
- Maximum 2 drives for a total of 48 tracks

DigiDrive FireWire 80	44.1/48 kHz	96 kHz	192 kHz
2	48	24	12
1	24	12	6

For more information and specific requirements, see DigiDrive FireWire 80 Requirements

Important Note About Mixing Drive Types With Pro Tools | HD Systems

You cannot spread audio files from one session across different types of drives. For example, if

you have a session with audio files on SCSI drives, you cannot record or play back Pro Tools files from an IDE/ATA or firewire drive. (this applies to audio files only, video can be on a different type of drive, or the same type of drive as the audio files in a session)

Using Non-ATTO ExpressPro-Tools formatted drives

ATTO SCSI HBA Cards

If you are using an ATTO SCSI HBA card and wish to only use drives which are formatted with a utility other than ExpressPro-Tools (such as FWB HD Toolkit), you should choose not to install the ATTO ExpressPro-Tools v2.3.2 extension. It is highly recommended that you use only one disk utility for all audio drives in your system. If you must use a mixture of drives formatted with different disk utilities, follow this procedure:

- 1. Launch the ATTO ExpressPro-Tools v2.3.2 application
- 2. Double-click on a drive to bring up the "Device Information" window
- 3. Check the "Inhibit Driver Loading" box for the appropriate SCSI IDs on that channel (or use the "Apply to all" button to apply this setting to all SCSI IDs on that channel)
- 4. Click "OK" to close the "Device Information" window
- 5. Install the ATTO ExpressPro-Tools v2.3.2 INIT in the Extensions folder. This can be done by launching the ATTO ExpressPro-Tools v2.3.2 Installer
- 6. Restart your computer

Your drives will now be controlled by the ATTO ExpressPro-Tools v2.3.2 driver. This procedure will not place the ATTO driver on your hard disks or overwrite any existing drivers on your hard disks. This procedure will not work with software RAID systems.

Note: Mac OS 9.2 requires ATTO ExpressPro-Tools v2.7 or higher, available at: http://www.attotech.com/software/

Adaptec SCSI HBA Cards

If you are using an Adaptec SCSI HBA card it is highly recommended that you initialize all of your audio drives with the same disk utility.



Qualified SCSI HBA Cards - Pro Tools|HD Systems for Mac OS

For maximum track count, use of a qualified SCSI HBA (Host Bus Adapter) card is required. Optional SCSI HBA cards bundled (by Apple) with some G4 computers are not compatible due to lack of support for external drives.

Depending on your computer certain cards are qualified for use with Pro Tools, refer to your computer's "SCSI HBA Card" section for details at the following links:

G4 with AGP Graphics

The following card is officially qualified with Pro Tools | HD systems:

Digidesign SCSI64 Kit

ATTO ExpressPCI SCSI HBA card EPCI-DC (ExpressPCI Dual Channel Ultra/WIDE HBA)

With the following requirements:

- ATTO ExpressPCI Firmware v1.4.4 f1, available at: www.digidesign.com/download/ptutil.html
- ATTO ExpressPro-Tools v2.3.2 (supplied on Pro Tools v5.3 installation CD-ROM) or higher with Synch Transfer Rate set to 20 (10) and PCI Burst Rate set to 32 bytes
- **Note:** Mac OS 9.2 requires ATTO ExpressPro-Tools v2.7 or higher, available at: www.attotech.com/software

Note: Adaptec 2940UW and 3940UW cards with G4s are unsuitable for full Pro Tools performance. Due to PCI bus related issues the Adaptec 2940UW and 3940UW SCSI HBA cards are unable to provide full Pro Tools performance. Additionally, Adaptec has discontinued these cards, and as a result there will be no future engineering support from Adaptec on these cards.

Pro Tools TDM Mac Requirements For IDE/ATA Hard Drives

Up to 32 track, 24 bit, 48 KHz performance from one dedicated internal IDE/ATA audio drive is supported on qualified G3 and G4 Pro Tools systems*

Drives must meet the following requirements:

Minimum Drive Requirements

- Disk drive rotational speed: 7200 RPM or faster.
- Average seek time of less than 10.0 ms
- Support of the UDMA66 controller
- Drive must be dedicated for audio. Note: Boot drives may be used for audio tracks, however performance and track count may vary.
- Drives should be initialized with Apple Drive Setup as HFS or HFS+ file systems.

Drive Space Required

- Mono, 16-bit, 44.1 kHz audio requires approximately 5 MB/minute disk space.
- Mono, 24-bit, 44.1 kHz audio requires approximately 7.5 MB/minute disk space.

Note: Pro Tools has a single audio file size limit of 2048MB, even when used with Mac OS 9.x and the HFS+ file system. This equates to about 4.5 hours at 24-bit, 44.1 kHz.

*IDE/ATA support is limited to Powermac G3 or later models, which include a built-in ATA bus. Pre-G3 models that only shipped with SCSI have not been tested with add-on ATA/IDE controller cards.

DigiDrive FireWire 80 Requirements

Pro Tools System Compatibility

DigiDrive FireWire 80 drives have been qualified with the following Mac & Windows systems:

- Pro Tools | HD Systems (with Pro Tools 5.3 or higher)
- Pro Tools | 24 MIX Systems (with Pro Tools 5.1.1 or higher)
- Pro Tools LE Systems (with Pro Tools 5.1.1 or higher)

Macintosh System Requirements

CPU

 All G4 desktop models with AGP graphics cards (pre-AGP Graphics desktop models are not supported)

System Software

- Mac OS 9.1 or higher
- Firewire Enabler (version 2.7 or higher)
- Firewire Support (version 2.7 or higher)
- FireWire Enabler v2.7 and FireWire Support v2.7 are Mac OS Extensions included with OS 9.1. run the Software Update Control Panel to update to the latest version of these extensions in OS 9.1 or higher. Both of these extensions must be enabled in your System Folder/Extensions folder in order to mount and use firewire drives.
- Supported formatting utility: Mac OS "Erase Disk" command
 - 1. Select firewire drive (highlight drive icon on desktop)
 - 2. Go to the "Special" menu in the Apple OS menu bar
 - 3. Choose "Erase Disk" command
 - 4. Choose Mac OS Extended (HFS+)
 - 5. Note: partitioning is not an option using the Erase Disk command. To increase performance and improve seek time, Digidesign recommends that you allocate a portion of your hard drive for recording. In Pro Tools, Choose Setups/Preferences and click Operation. Under the Open Ended Record Allocation option, select Limit To and enter a number of minutes to be allocated.
- Third-party drive utilities not supported:
 While third-party drive format utilities may work on the owner's CPU where that
 application's software and extensions are installed, **the best way to ensure compatibility on all Macs with firewire drives is to use the Apple Erase Disk function for formatting.** If you plan to also use your Firewire drive on other machines
 that may not have the same third-party drivers, your drive may not mount on that

machine, or you may experience DAE or system errors.

- Supported file format: Mac OS Extended (HFS+)
- HFS standard formatting will result in finder copy problems with files over 2 GB
- For additional information see the **DigiDrive FireWire Guide** in the **Technical Documents Library** of the Support/Tech Support section of the website. (printed manual included with the DigiDrive FireWire 80)

Windows System Requirements

- Digidesign-approved Windows-based computer with Firewire capability
- Pro Tools 24 MIX systems for Windows 2000
- Pro Tools LE systems for Windows 98 SE
- Pro Tools LE systems for Windows Me When using with 98 ME, a third-party disk utility like PartitionMagic® is required to format the drive before it can be used.
- For additional information see the **DigiDrive FireWire Guide** in the **Technical Documents Library** of the Support/Tech Support section of the website. (printed manual included with the DigiDrive FireWire 80)

General Technical Specifications

Performance Expectations

- Supported track count (per drive): 24 tracks per drive at 48 KHz/24-bit @ 500ms edit density
- Maximum 2 drives for a total of 48 tracks
- Digidesign has qualified configurations containing a maximum of two DigiDrive FireWire drives daisy-chained to a Pro Tools workstation using Digidesign supplied cables. (more than 2 drives may result in -6042 errors on all systems)
- Individual user experience regarding track count and performance may vary depending on edit density and available CPU cycles. (things like automation, RTAS plug-ins, or other CPU-dependent processes)

Additional Configuration Requirements & Guidelines

Keep in mind the following when configuring DigiDrive FireWire drives:

The FireWire cable between the Pro Tools workstation and the first drive (or between

any two ports) cannot exceed 14.76 feet (4.5 meters).

- The total FireWire cable from the system to the last drive cannot exceed 236 feet (72 meters).
- A 12-inch (30.5 cm) FireWire cable ships with each DigiDrive FireWire drive to daisychain the drives.
- Either FireWire connector on the drive can be used to connect to the system and other drives.
- Maximum compatibility is achieved when your system has dual FireWire ports.
 Daisychain DigiDrive FireWire drives to one port and use the other port for cameras and video decks.
- DigiDrive FireWire drives do not require a terminator.
- Although firewire drives can be hot-swapped without rebooting the host computer, it is necessary to quit Pro Tools before swapping drives and then re-launching Pro Tools.
- If your Windows CPU does not have an IEEE 1394 (FireWire) port built in, you will need to install a PCI-to-FireWire card. Digidesign has tested the "SIIGnifficantly Better 3-port PCI" FireWire card from SIIG with good results. While other Windows Firewire cards may work, Digidesign cannot guarantee results or performance on all cards. With any multiport card, connect to the first port if at all possible.
- In order to use Mac formatted drives on Windows systems, MacOpener from www.dataviz.com is required.
- Windows formatted drives will not be recognized as audio drives by Pro Tools on the Mac.
- It is highly recommended that you not spread audio files from one session across different types of storage (i.e. SCSI, FireWire, IDE/ATA). This is not possible on Pro Tools HD systems, and may cause bus problems on other Pro Tools systems. On the other hand, you may see improved performance if you store QuickTime video files on one type of drive and play the audio off another. This is because QuickTime video results in high bus traffic, while audio requires a lot of drive seeking. So storing QuickTime video files on your FireWire drives and audio on your SCSI drives may provide better performance than having audio and video playing together over the same bus.
- The DigiDrive FireWire 80 (as well as other firewire drives) are not qualified for use with AVoption or AVoption | XL. AVoption and AVoption | XL require SCSI storage for recording and playback. However, you can use the DigiDrive FireWire 80 to back-up your video storage SCSI drives.
- For additional information see the **DigiDrive FireWire Guide** in the Technical Documents Library of the Support/Tech Support section of the website (printed manual included with the DigiDrive FireWire 80) and the DigiDrive FireWire 80 SPECS in the Products/All Products database.

Although not fully tested and supported with Pro Tools systems by Digidesign, you may be able to use firewire drives from other manufacturers with similar results, given the same guidelines noted above. To date only Firewire drives with the following specifications have performed well with Pro Tools systems:

- Oxford 911 Firewire bridge chipset
- 7200 RPM drive
- 100 MHz ATA bus

Check with the drive manufacturer to verify that their drive has the "Oxford 911" or comparable chipset & drive speed of 7200 rpm.

While third-party drive format utilities may work on the owner's CPU where that application's software and extensions are installed, **the best way to ensure compatibility on all Macs with firewire drives is to use the Apple Erase Disk function for formatting.** If you plan to also use your Firewire drive on other machines that may not have the same third-party drivers, your drive may not mount on that machine, or you may experience DAE or system errors. The guidelines listed previously on this page for the DigiDrive FireWire 80 will generally yield the best results when using firewire drives with Pro Tools.

Maximum Performance Guidelines for Pro Tools|HD Systems On Mac OS

32-128 track performance with Pro Tools | HD systems requires the following configuration:

Compatible SCSI HBA card

Total System RAM:

- Minimum 256 MB
- Pro Tools application "Preferred Size" memory allocation set to 134 MB
- DAE is no longer an independent application, and therefore requires no additional RAM
- Do not change the "Minimum Size" in the memory allocation
- · Virtual memory is not supported

Additional RAM is required for:

- High edit density sessions, extensive use of plug-ins and addition of options like MachineControl (384 MB recommended)
- Sessions larger than the default track size* 384 MB minimum, 512 MB recommended (Pro Tools application "Preferred" memory allocation set to 225 MB)
- * Default session sizes are 64 tracks at 44.1/48 kHz, 32 tracks at 88.2/96 kHz and 12 tracks at 176/192 kHz

Pro Tools-Qualified Hard Drives

As with all Pro Tools systems, drive performance depends on a number of factors, including track count, edit density, and the use of crossfades or processing like Beat Detective. For sessions with high edit density, we recommend the following configurations. Testing has been conducted using Digidesign's DigiDrives. Performance with other drives may vary.

SCSI Drives—Approximate Track Counts:

SCSI Drives	44.1/48 kHz	96 kHz	192 kHz (No Chassis)	192 kHz (With Chassis)
4	128	64	24	16
2	64	32	12	12
1	32	16	6	6

When using QuickTime movies with Pro Tools | **HD systems,** for reliable performance of 16 or more audio tracks, audio drives should be connected to a compatible SCSI HBA card, with video drives connected to a separate SCSI bus (preferred) or IDE/ATA bus.



Get Power to burn with the latest Macs!

Go to the Apple Music & Audio website for info on upgrading your Mac audio workstation and the latest Mac audio happenings.

Pro Tools 24 MIX Systems for Power Macintosh Requirements

Digidesign PCI Cards Supplied with System

- MIX Core
- MIX Farm (with MIXplus & MIX³ only)

Other Card Options

Digidesign Audio Interfaces (one required)

- 888 | 24 I/O
- 888 I/O
- 882 | 20 I/O
- 882 I/O
- 1622 I/O
- 24-Bit ADAT Bridge I/O
- ADAT Bridge I/O

Digidesign Software Supplied with System

• Pro Tools 5.1.3

Optional Digidesign Software

Pro Tools|24 MIX Plug-In Finder

Optional Digidesign Hardware

- AVoption|XL
- AVoption
- ProControl
- Fader Pack (up to 5)

Supported CPU Models, Speeds & Requirements*

- Power Macintosh G4 (AGP graphics)
- Power Macintosh G4 (PCI graphics)
- Power Macintosh Blue & White G3
- Power Macintosh Beige G3
- Power Macintosh 9500 or 9600
- PowerBook G4 (Requires Magma 2 Slot or 4 Slot CardBus PCI Expansion System)

Additional Computer Requirements

System Software: Mac OS v9.0.4, 9.1, 9.2, 9.2.1, or 9.2.2 (depending on CPU model)

Total System RAM:

- Minimum 256 MB
- Pro Tools application "Preferred" memory allocation set to 70 MB
- DAE "Preferred" memory allocation set to 60 MB
- Virtual memory is not supported
- High edit density, extensive use of plug-ins, and addition of options like MachineControl, DigiTranslator, and AVoption|XL will require additional RAM

Monitor, color required, minimum resolution of 1024×768

Opcode OMS v2.3.8 or higher (supplied)

- Edit Pack
- Control | 24
- Video Slave Driver (VSD)
- Universal Slave Driver (USD)
- SYNC I/O (see MIX requirements)
- SMPTE Slave Driver (SSD, discontinued)
- SCSI64 Kit
- DigiDrive
- DigiDrive FireWire 80

Supported Optional Expansion Chassis

Third-Party MIDI Controllers & Interfaces

Third-Party Video Capture Cards

Pro Tools 5.2 for DigiStudio

Additional Requirements for Pro Tools 5.2 & DigiStudio

Apple QuickTime v4.1.2 or higher (QuickTime 4.1.2 is supplied on your Pro Tools CD. QuickTime 5.0.2 is also supported)

ATTO ExpressPro-Tools v2.3.2 or higher (supplied)

Hard Drive Minimum Requirements

SCSI HBA Card Required

Maximum Performance Guidelines

*Note: Pro Tools | 24 MIX systems require at least one PCI slot. Apple computers that do not contain PCI slots, such as the G4 Cube and iMac, are not supported with this system, with the exception of the PowerBook G4/Magma System

Digidesign Compatibility Documents Index

Digidesign 2001 Junipero Serra Blvd. Daly City, CA 94014-3886 U.S.A Tel 650.731.6300 Fax 650.731.6399 Product Information United States & Canada 1.800.333.2137 North & South America 650.731.6102 (USA) Europe (England) 44.1753.658496 Asia (Japan) 81.3.3505.7963

Other Digidesign PCI Card Options - Pro Tools|24 MIX for the Mac OS

MIX Farm: Maximum of 7 MIX Farm or MIX Core cards supported. If you are adding one or more MIX Farm cards to a Pro Tools |24 system, refer to the Pro Tools **Expanded Systems Guide** in the **Technical Documents Library** of the Support/Tech Support section of the website.

DSP Farm*: DSP Farms with serial numbers lower than FG10501 may be used for Plug-In operation but do not support connection of an Audio Interface.

MIX I/O: Maximum of 2 MIX I/O cards supported (Only 1 MIX I/O card supported with MIX systems that are upgraded Pro Tools|24 systems). Some MIX I/O cards may experience recognition problems in the 400 MHz Blue & White G3 or G4s with AGP Graphics. If so, please contact your local Digidesign office.

d24: With MIX systems that are upgraded Pro Tools | 24 systems some d24 cards may experience recognition problems in the 400 MHz Blue & White G3 or G4s with AGP Graphics. If so, please contact your local Digidesign office. d24 card not available for separate purchase.

SampleCell II Plus: Pro Tools 5.1.1 required for more than one SampleCell II or SampleCell II Plus card in 2001 AGP G4 models (466MHz, 533MHz, Dual 533MHz, 667MHz, and 733MHz).

SampleCell II*

SampleCell II TDM Module

*Incompatibility with older DSP Farms and SampleCell II Cards & The Blue & White G3 and G4

A rev "QC" or later of the AMCC chip is required for Blue & White G3 and G4 compatibility. This rev number appears on the AMCC chip following number "5933". Older versions can cause your computer to hang while booting or when launching Pro Tools or DigiTest. QC or higher chip is required for compatibility with the PCI 2.1 spec. Ways to identify these boards are in the grid below:

Board	S/N's Below	Manufactured Before	Board Rev Before
DSP Farm I	FF09226	7/9/97	Rev H
SampleCell II	HH02001	5/20/97	Rev D

If a customer has previously updated their board (or received a refurbished card), the serial number will remain the same, but the board rev will be updated (and the AMCC chip will have "QC" or later). Cards with the rev "Q" chip can be upgraded. Please contact Digidesign Technical Support to arrange for a return authorization. Registration is required.

Note: All SampleCell II Plus cards are newer, and therefore already have the compatible chip. (The SampleCell II Plus cards are the same as the original SampleCell II PCI cards, but with the included 32 MB of RAM soldered on the card)

Optional Digidesign Software - Pro Tools|24 & MIX Systems

Note: A Digidesign-qualified external diskette drive (USB floppy drive) is required for most software installations when used with Macintosh Blue & White G3, G4, or PowerBook models. Exceptions are pointed out below.

- Access Virus v1.1.1: Requires a Pro Tools 24 MIX system.
- Bruno/Reso v1.2.1
- **DINR** v3.4.1 HUM Removal-TDM is not supported on MIX Core and MIX Farm cards.
- **DigiTranslator** v2.0 DigiTranslator 2.0 requires a TDM Mac system with Pro Tools 5.1.3. DigiTranslator 1.0 (included with DigiTranslator 2.0) requires no hardware. DigiTranslator 1.0 supports Pro Tools 5.0.1 session files only. [additional information]
- **DPP-1** v1.7.1
- **D-Fi** v1.5.1
- **D-fx** v1.3.1
- **D-Verb** v1.8.1
- Focusrite d2 v1.6.1
- Focusrite d3 v1.4.1
- MachineControl v1.0.1 *see below
- MasterList CD v2.4 [additional information]
- **Maxim** v1.3.1
- **MP3 Option** v1.1.1 does not require a floppy drive, download-only, available from the DigiStore

[additional information & updates]

- PostConform v2.0 [additional information]
- **Reverb One** v1.1 Requires a Pro Tools 24 MIX system.
- SampleCell Editor v3.1 (w/ SampleCell II Plus)
- SampleCell-TDM v1.2 (w/ TDM Module), does not require a floppy drive
- **Soft SampleCell** v3.1 [additional information]
- SoundReplacer v1.2.1
- SurroundScope v1.0.1

For a complete list of plug-ins from Digidesign & Digidesign Development Partners, see the Plug-In Finder in the Products section of the website.

* Use of MachineControl with Blue & White G3 or G4 requires a GeeThree Stealth Port Modem-to-Serial port converter with driver v1.0.3 or higher *or* the Keyspan USB-to-Serial Adapter USA-28x with driver v1.6 or higher. When using the USA-28x the "Printer Port Emulation" option in the Keyspan control panel must be disabled. Keyspan firmware updates are available at: http://www.keyspan.com/downloads/

DigiTranslator™

DigiTranslator 2.0

DigiTranslator 2.0 adds new functionality and speed to enhance the transition between Avid and Digidesign workstations. Fully integrated into Pro Tools 5.1.3, DigiTranslator 2.0 provides direct import and export of OMF media files and sequences. It also provides direct integration with Avid Unity™ MediaManager for drag and drop file management on Unity MediaNet shared storage systems.

DigiTranslator 2.0 functionality in Pro Tools 5.1.3 requires the separate purchase of DigiTranslator, or an upgrade from DigiTranslator version 1.0. Please Contact Digidesign Customer Service for upgrade information.

For more information on "What's New in Pro Tools 5.1.3", see the Pro Tools 5.1.3 Addendum in the Technical Documents Library section of Support/Technical Support on the website, and the Pro Tools 5.1.3 announcement in the News section.

See also: Pro Tools 5.1.3 Compatibility Information

DigiTranslator 2.0 Requirements

DigiTranslator 2.0 is integrated into Pro Tools 5.1.3, and therefore shares the same system requirements. When using DigiTranslator 2.0 functions for large sessions or large files, you may need to increase the amount of RAM allocated to the Pro Tools application.

Basic Requirements:

- Pro Tools version 5.1.3
- Digidesign approved Macintosh Pro Tools TDM system
- Macintosh OS 9.1, 9.2, 9.2.1
- 256 MB Total System RAM
- Pro Tools application recommended allocation 70 MB
- DAE recommended allocation 60 MB
- Digidesign approved floppy drive for software authorization

DigiTranslator 1.0

DigiTranslator 1.0 is a standalone application. Though it does not have all of the flexibility or

features of version 2.0, DigiTranslator 1.0 does not require any Pro Tools hardware or software. For this reason, DigiTranslator 1.0 can be installed and used on a Pro Tools system, on an Avid video workstation, or on a low-cost, dedicated "offline" system in a machine room, for example. DigiTranslator 1.0 is sold bundled with DigiTranslator 2.0. (Note: purchase includes only one authorization, so you may use both versions on the same machine only)

Features not supported by DigiTranslator 1.0

- Pro Tools 5.1.3 integration
- 24-bit OMF files
- Playback of embedded media files
- Translation of Avid clip-based and keyframe volume data to Pro tools breakpoint automation
- Support for Pro Tools 5.1 format sessions (must save as Pro Tools 5.0 format)
- Avid Unity[™] MediaManager Integration
- Export of Broadcast WAV files
- Sample-accurate exports of Pro Tools audio and session files

DigiTranslator 1.0 Requirements:

- A Power Macintosh system running OS 8.1 or higher
- 128 MB of Total System RAM
- CD-ROM drive for software installation
- Digidesign approved floppy drive for software authorization installation

PostConform v2.0 Requirements

Computer Requirements

PostConform v2.0 is a Mac OS product which is qualified to run on any Power Macintosh computer with 64 MB of RAM or higher. OS 8.6 or 9.0 is required.

Pro Tools Hardware Requirements

- Pro Tools | 24 MIX, Pro Tools | 24 MIXplus or Pro Tools | 24 system
- Pro Tools III PCI systems are now supported with PostConform v2.0cs1

Synchronization Requirements

PostConform v2.0 requires either a Digidesign Universal Slave Driver or an LTC-to-MTC converter for synchronization.

- \bullet USD: Universal Slave Driver connects directly to Pro Tools |24 MIX and MIXplus systems, but requires a qualified modem-to-serial converter for use with Pro Tools III systems in Blue & White G3 / G4 configurations.
- LTC-to-MTC Converters: Both USB and serial MIDI interfaces work effectively with Pro Tools. Digidesign recommends using a serial MIDI interface, as they offer the tightest possible MIDI timing. Serial MIDI interfaces require either a Mac serial port or a qualified modem-to-serial port adapter.

Machine Control Requirements

For machine control of external decks, PostConform requires either a Mac serial port, a qualified modem-to-serial port adapter or USB-to-serial adapter .

Serial Port Requirements

For modem-to-serial conversion on Blue & White G3 and G4, Digidesign currently supports the Griffin gPort, gPort II and the GeeThree Stealth Port, Stealth Port for G4 - AGP video, and Stealth Port for Dual Processor G4s.

For USB-to-serial conversion, Digidesign qualifies the Keyspan USB Serial Adapter USA-28X with driver v1.6 or higher. Firmware updates are available at: http://www.keyspan.com/downloads/

DAE/DSI Requirements

Post Conform v2.0 requires a special version of DAE (version 5.0P) which is installed by the PostConform v2.0 installer or DAE v5.0.1 or higher which is installed by the latest Pro Tools installer.

If you are planning to run Pro Tools v4.3.1 or earlier and PostConform v2.0 on the same system, the DAE and DSI files installed with PostConform may need to be swapped for those which

shipped with your older Pro Tools software. PostConform will continue to be tested with newer releases of DAE and DSI as they are created in the future.

Audio Interfaces

PostConform v2.0 has been officially qualified with 888 I/O, 888|24 I/O, 882 I/O and 882|20 I/O.



AVoption|XL Requirements

Please Note: AVoption | XL has unique compatibility requirements. If the information on this page appears to contradict information listed elsewhere in these Compatibility Documents, please adhere to the information listed on this page when configuring a system which includes AVoption | XL.

Important Information: (repeated below) For updated slot order information with the latest qualified configurations, refer to the **AVoption & AVoption XL Guide** in the **Technical Documents Library** of the Support/Tech Support section of the website. Also see the **"Supported Optional Expansion Chassis"** web pages for further compatibility information when used with Pro Tools|24 MIX Expanded Systems or Pro Tools|24 Expanded Systems.

Digidesign PCI Card and Hardware Supplied with System

- Meridien Digital Media Board
- Break Out Box with Analog Video I/O board installed

Digidesign Software Supplied with System

- Pro Tools® 5.1.3
- **AVoption Software** (provided on separate CD)
- DigiTranslator 2.0™ more information on DigiTranslator

Required Hardware Components (not supplied)

- Pro Tools | 24, Pro Tools | 24 MIX, Pro Tools | 24 MIXplus or Pro Tools | 24 MIX³ based system
- Universal Slave Driver (USD)
- **For Audio Storage:** ATTO ExpressPCI Dual Channel Ultra/WIDE SCSI HBA card (EPCIDC). This card is available from ATTO or from Digidesign in the SCSI64 Kit.
- **For Video Storage:** Only one SCSI card (described above) is required for both audio and video storage when 3:1 is the highest desired video quality, although Digidesign recommends a second SCSI card for optimum performance. When 2:1 or 1:1 (uncompressed) video resolutions are required, a second SCSI interface dedicated to video storage is required namely, the ATTO ExpressPCI Ultra-3 LVD SCSI HBA card (EPCI-UL3D).

Optional Hardware

• **Serial Digital Interface** - Optional interface that installs onto the Video I/O board installed in the Break Out Box. This interface gives AVoption|XL Serial Digital (SDI) input and output capabilities.

Optional Software

• **FilmFrame™** – Combined with AVoption|XL and Pro Tools 5.1.3, FilmFrame now supports import, editing and playback of 24P video clips created on Avid 24P workstations. Please see your Digidesign dealer for more information about this great new feature.

more information on FilmFrame™

Supported CPU Models, Speeds & Requirements

- Power Macintosh G4 (AGP graphics)
- Power Macintosh G4 (PCI graphics)
- Power Macintosh Blue & White G3

Each of the above Computers requires either the Digidesign 13-Slot Pro Tools Expansion Chassis or a qualified Magma Expansion Chassis.

• Power Macintosh 9600 (on compatibility hold)

Important Update Information: March 2001 - We are seeing performance issues on some 9600 models with AVoption|XL and have currently put them on compatibility hold with AVoption|XL pending further ongoing investigation. These issues have been observed on some but not all 9600/300 and 9600/350 cpus with both Pro Tools v5.0.1 and v5.1.

AVoption|XL has been tested with Apple Macintosh 9600 CPU's with processor speeds as low as 300 MHz. The overall performance of your Pro Tools system will be greatly improved with higher-speed CPU's. For optimal responsiveness, we strongly recommend you use a CPU with at least 300 MHz clock speed with AVoption|XL.

Note: The Power Macintosh Beige G3 is not officially qualified with AVoption | XL.

RAM Requirements:

- Total System RAM Minimum 256 MB
- Pro Tools Preferred Allocation 100 MB
- DAE Preferred Allocation 60 MB

Expansion Chassis

• Important Compatibility Documents: For updated slot order information with the latest qualified configurations, refer to the AVoption & AVoption XL Guide in the Technical Documents Library of the Support/Tech Support section of the website and the "Supported Optional Expansion Chassis" web pages for further compatibility information when used with Pro Tools|24 MIX Expanded Systems or Pro Tools|24

Expanded Systems.

• **Important Cooling Issue:** If you install the AVoption|XL PCI board (Meridien Digital Media Board) in either the Digidesign 13-slot or Magma chassis that is older than the rev G models, you must install the additional cooling fan (Digidesign part number MC201) in the chassis. The newer rev G Digidesign & Magma 13 slot chassis (identified by serial numbers that end in "00G") no longer require a fan kit with AVoption|XL.

- **WARNING:** SBS (Bit3) chassis are not supported in any configuration with AVoption|XL. If you install the AVoption|XL board (Meridien Digital Media Board) in an SBS (Bit3) chassis, you run the serious risk of damaging the board.
- AVoption XL and Avid Unity MediaNet requirements & slot order

Drive Compatibility

- **Audio Drives:** AVoption|XL can be configured with any audio drives qualified for use with Pro Tools in general. Refer to the Pro Tools TDM Hard Drive Minimum Requirements page for details.
- **Video Drives:** Avid rS drives, iS Pro drives, iS Plus drives or DigiDrives are fully qualified.
- **About Avid MediaDock:** At this time, the Avid MediaDock is not officially qualified for use with AVoption|XL. Additionally, LVD (Low Voltage Differential) drives are required on AVoption|XL systems where compression levels of 2:1 or 1:1 (uncompressed) are desired. Many of the models listed above are available as LVD drives.
- **About Firewire Drives:** The DigiDrive FireWire 80 (as well as other firewire drives) are not qualified for use with AVoption or AVoption|XL. AVoption and AVoption|XL require SCSI storage for recording and playback. However, you can use the DigiDrive FireWire 80 to back-up your video storage SCSI drives.

Third Party Video Capture Cards: QuickTime capture/playback cards are not qualified for use in AVoption|XL systems.

Dual Screen Monitor Cards: Currently, the only Dual Screen Monitor Card qualified for use with AVoption |XL is the Appian Jeronimo 2000 AGP for Macintosh. This is a single AGP card which can drive two VGA monitors. This card is currently qualified only for use with single-processor G4 computers with AGP graphics systems. The PCI version of this card is not supported. Digidesign has also noted problems when using this card in the latest dual-processor G4 CPUs - this configuration is not qualified at this time.

For more information see the Appian page in the Digidesign Support / Downloads section

Maximum Performance Guidelines

Compatible Dual-Channel SCSI HBA card

Total System RAM: Minimum 256 MB

Use one SCSI Channel for Pro Tools audio storage and the second SCSI channel for video storage. If Compression levels of 2:1 or 1:1 (uncompressed) is desired then a 2nd Compatible Dual-Channel LVD SCSI HBA card is required and video storage should be connected to this controller.

Note: AVoption | XL supports "plug and play" compatibility with many Avid systems. When "inheriting" a drive containing audio and video data from an Avid system, we recommend you connect this drive to the SCSI channel dedicated to video storage. There is no need to copy the audio data from such a drive to your dedicated audio drives, however we recommend that you not record any additional audio tracks onto this drive.

Virtually all the testing for AVoption | XL was done with a baseline of 32 tracks of 24- bit/48k audio and one stream of uncompressed video data (record and/or playback). These test configurations generally included one drive for every 16 tracks of audio. One way to achieve higher track counts is to dedicate more drives to the audio tracks.

On a supported configuration, you should be able to easily achieve this performance baseline, even with a high degree of edit density on each track. The higher the edit density, the more heavily taxed will be the storage subsystem.

You may find much better results than this baseline, since Digidesign's performance tests re designed to stress the storage subsystem more heavily than the average "real world" usage. In several cases, our test group was able to continuous record or playback of 48 audio tracks and uncompressed picture simultaneously.

There are other possible steps that can be taken to maximize the performance of a Pro Tools system with AVoption|XL. Consult the AVoption|XL Guide or Release Bulletin (available for download as a PDF here) for the latest information

Expansion Chassis Requirements - Pro Tools 24 MIX

Please see the System Configurations grid at the bottom of this page for detailed information on which computers Digidesign supports with the different models of chassis.

13 Slot

- Digidesign Pro Tools Expansion Chassis, 13-Slot
- SBS (Bit3) 13 Slot Expansion Chassis model DD23
- SBS (Bit3) 13 Slot Expansion Chassis model 24-700-2-2
- SBS (Bit3) 13 Slot Expansion Chassis model 240-2-2
- SBS (Bit3) 13 Slot Expansion Chassis model 240-2-201
- Magma 13 Slot Expansion Chassis model P13R
- Magma 13 Slot Expansion Chassis model PCI13R
- Magma 13 Slot Expansion Chassis model PCI-13-RX-400V (must have serial number PE01732 or higher)

Note: 13 Slot Chassis support a total of up to 10 Digidesign cards - this may include up to 7 MIX Core/Farm cards, 2 d24 or MIX I/O cards and any number of other Digidesign cards.

7 Slot

- **Digidesign Pro Tools Expansion Chassis, 7 Slot** (the SBS model DD007-R is available exclusively through Digidesign as MH477)
- SBS (Bit3) 7 Slot Expansion Chassis model DD22-1
- **SBS (Bit3) 7 Slot Expansion Chassis model 2101-00-2** (must use IBM PCI 2.1 compliant Bridge chips, with host card that starts with 20-101)
- MAGMA 7 Slot Expansion Chassis model P7R-D1 (7-slot rack-mount expansion chassis. Blue & White G3 or higher required)
- MAGMA 7 Slot Expansion Chassis model P7RQ-D1 (7-slot rack-mount expansion chassis. Blue & White G3 or higher required)

For further information about these products, please contact your Digidesign dealer or local Digidesign office and ask for the Digidesign Development Partner Catalog.

Customers should specify the following requirements when ordering. Any 7-slot chassis purchased prior to 10/98 will need HW upgrading. Please contact your chassis manufacturer for details.

- Chassis must have 3.3 volt power supply
- When used with G3 or G4 computers the Chassis is required to have PCI 2.1 compliant bridge chips
- Requires 2 foot, 4 foot or 1 meter Expansion Chassis cable 6 foot and 1.5 meter cables currently not supported.
- AVoption Users: Please read the additional AVoption Requirements
- AVoption | XL Users: Please read the additional AVoption | XL Requirements

SBS (Bit3) 7 Slot with Beige G3 requires that the G3 uses Apple's "Silk" ROM. The "Silk" ROM shipped in late 1998 beige G3 computers with the following model numbers:

Desktops:

- 266 MHz M6503LL/A
- 300 MHz M7104LL/A

Mini Towers:

- 300 MHz M7246LL/A
- 333 MHz M7106LL/A

Customers with early-mid 1998 G3 machines wishing to use a Pro Tools | 24 MIX system and SBS (Bit3) 7-slot Expansion Chassis should contact Digidesign for upgrade information.

For more information about expansion chassis setup and card order configurations please download the **Expanded Systems Guide** in the Technical Documents Library of the Support/Tech Support section of the website.

Digidesign Card Requirements:

- DSP Farm cards must be Rev H or higher (serial number FF09226 or higher) for compatibility with Expansion Chassis.
- SampleCell II cards: must be Rev D or higher (serial number HH02001 or higher) for compatibility with Expansion Chassis.

Customers with older cards should contact their local Digidesign office.

Magma 2 Slot CardBus PCI Expansion System

The Magma 2 Slot CardBus PCI Expansion System and Apple Titanium PowerBook G4 are now Digidesign approved with Mix and MIXplus

Track Count:

- MIX or MIXplus with Pro Tools v5.1.1 Support for up to 30 tracks of playback and record
- Track count is based on tests using 24-bit/48kHz audio with 300ms edits across all tracks.
- Track count will increase as bit /sample rates and edit density are decreased.

System details:

- Computer: Apple Titanium PowerBook G4, 256MB RAM, OS 9.1
- Chassis: Magma 2 Slot CardBus chassis, Model CB2S with the ATTO ExpressPCI UL2S SCSI HBA
- Hard Drives: Two Digidesign approved SCSI drives for maximum track count

Pro Tools|24 MIX System Configuration Support for Power Macintosh

Computer	Internal Core System	Pro Tools Expansion Chassis 7 or 13 Slot	*see warning below regarding AVoption & AVoption XL	Magma 7 or 13 Slot
G4 with AGP Graphics: 466 MHz G4 533 MHz G4 667 MHz G4 733 MHz G4 800 MHz G4 867 MHz G4 933 MHz G4 Dual 533 MHz Dual 800 MHz Dual 1 GHz	YES	YES	YES	YES

G4 with AGP Graphics:	YES	YES	YES	YES
G4 with PCI Graphics	YES	YES	YES	YES
Blue & White G3	YES	YES	YES	YES
Beige G3 - 333/300/266/233 MHz (Tower/Desktop)	YES	NO Exception: 13 Slot chassis with S/N lower than NB0600100C are supported.	YES Exception: DD007-R are not supported	YES Exceptions: P7R-D1, P7RQ-D1, and PCI-13R are not supported
9600 - 350/300/233/200 MHz	YES	NO Exception: 13 Slot chassis with S/N lower than NB0600100C are supported.	YES Exception: DD007-R are not supported	YES Exceptions: P7R-D1, P7RQ-D1, and PCI-13R are not supported
9500 - (150 MHz or higher for more than 32 tracks)	YES	NO Exception: 13 Slot chassis with S/N lower than NB0600100C are supported.	YES Exception: DD007-R are not supported	Exceptions: P7R-D1, P7RQ-D1, and PCI-13R are not supported

Exceptions that effect all of the above Computers except the 9500 & 9600:

- *WARNING: If you install the AVoption boards (ABVB and Janus) in an SBS (Bit3) chassis, you run the serious risk of damaging the boards. SBS (Bit3) chassis may be used with AVoption only in a configuration with 9500 or 9600 computers, and when AVoption's two PCI boards (ABVB and Janus) are installed in the CPU. Refer to the AVoption user guide for precise installation instructions.
- * **WARNING:** SBS (Bit3) chassis are not supported in any configuration with AVoption|XL. If you install the AVoption|XL board (Meridien Digital Media Board) in an SBS (Bit3) chassis, you run the serious risk of damaging the board.

Optional SCSI HBA card bundle (by Apple): For maximum track count, this configuration requires use of a qualified SCSI HBA card. Optional SCSI HBA cards bundled (by Apple) with

Power Macintosh computers are not compatible with this configuration due to the lack of NV RAM to store Pro Tools desired SCSI transfer rate.

When using HDT 2.5.3 or earlier with a qualified ATTO SCSI HBA card, Firmware v1.1.1 is required. For Blue & White G3 and G4 computers, ATTO ExpressPro-Tools v2.3.2 or higher is required along with ATTO SCSI HBA card, Firmware v1.3.5 or higher. Please contact ATTO for the latest information. Note: Mac OS 9.2 requires ATTO ExpressPro-Tools v2.7 or higher, available at: http://www.attotech.com/software/

Radius VideoVision not supported: Radius VideoVision is incompatible with the optional video card included with some Beige G3 Power Macintoshes. Please contact Radius for the latest information.

Further Exceptions Apply: Please refer to the "Supported CPU Models, Speeds & Requirements" list back on the Pro Tools|24 MIX Systems for Power Macintosh Requirements page for your chosen computer.

Expansion Chassis Requirements - Pro Tools|24

Please see the System Configurations grid below for information on which computers Digidesign supports with the different models of chassis.

13-Slot

- Digidesign Pro Tools Expansion Chassis, 13-Slot
- SBS (Bit3) 13 Slot Expansion Chassis model DD23
- SBS (Bit3) 13 Slot Expansion Chassis model 24-700-2-2
- SBS (Bit3) 13 Slot Expansion Chassis model 240-2-2
- SBS (Bit3) 13 Slot Expansion Chassis model 240-2-201
- Magma 13 Slot Expansion Chassis model P13R
- Magma 13 Slot Expansion Chassis model PCI13R
- Magma 13 Slot Expansion Chassis model PCI-13-RX-400V (must have serial number PE01732 or higher)

Note: 13-Slot Chassis support a total of up to 10 Digidesign cards - this may include up to 7 MIX Core/Farm cards, 2 d24 or MIX I/O cards and any number of other Digidesign cards.

7-Slot

- **Digidesign Pro Tools Expansion Chassis, 7-Slot** (the SBS model DD007-R is available exclusively through Digidesign as MH477)
- SBS (Bit3) 7 Slot Chassis model DD22-1
- SBS (Bit3) 7 Slot Chassis model 2101-00-2 (must use IBM PCI 2.1 compliant Bridge chips, with host card that starts with 20-101)

For further information about these products, please contact your Digidesign dealer or local Digidesign office and ask for the Digidesign Development Partner Catalog.

Expansion Chassis Requirements

Customers should specify the following requirements when ordering:

- Requires 2 foot, 4 foot or 1 meter Expansion Chassis cable 6 foot and 1.5 meter cables currently not supported
- When used with G3 or G4 computers the Chassis is required to have PCI 2.1 compliant bridge chips
- AVoption Users: Please read the additional AVoption Requirements
- AVoption | XL Users: Please read the additional AVoption | XL Requirements

For more information about expansion chassis setup and card order configurations please download the **Pro Tools 5.1 Expanded Systems Guide** in the Technical Documents Library of the Support/Tech Support section of the website. For updated slot order information with the latest Digidesign and Magma 13-slot chassis download this PDF.

Digidesign Card Requirements

DSP Farm cards: must be Rev H or higher (serial number FF09226 or higher) for compatibility with Expansion Chassis.

SampleCell II cards: must be Rev D or higher (serial number HH02001 or higher) for compatibility with Expansion Chassis.

Customers with older cards should contact their local Digidesign office.

Pro Tools|24 System Configuration Support for Power Macintosh

Computer	Internal Core System Up to 32 tracks	Pro Tools Expansion Chassis 7- or 13-Slot Up to 32 tracks + more slots for DSP Farms, SampleCell IIs	SBS (Bit3) 7- or 13- Slot Chassis Up to 32 tracks + more slots for DSP Farm, SampleCell IIs	Magma 6- , 7- or 13- Slot Chassis	Supports Adding MIX Farm Replacing DSP Farm (d24, MIX Farm, SCSI card) Up to 64 tracks	Adding MIX Farm	Pro Tools Expansion Chassis 7- or 13-Slot Up to 64 tracks + more slots for DSP Farms, SampleCell IIs	SBS (Bit3) 7- or 13- Slot Chassis UP to 64 tracks + more slots for DSP Farm, SampleCell IIs	Magma 13- Slot Chassis Up to 64 tracks + more slots for DSP Farms, SampleCell IIs
G4 with AGP Graphics:	YES	YES	13-Slot Only	YES	YES	YES	YES	13-Slot Only	YES
G4 with AGP Graphics: 350MHz G4 400MHz G4 450MHz G4 500MHz G4 Dual 450MHz Dual 450MHz	YES	YES	13-Slot Only	YES	YES	YES Requires supported Chassis	YES	13-Slot Only	YES

G4 with PCI Graphics	YES	YES	YES	YES	YES	YES	YES	YES	YES
						Requires supported Chassis		note: 7-Slot Chassis require PCI 2.1 Compliant Bridge Chips	
Blue & White G3	YES	YES	YES	YES	YES	YES Requires supported Chassis	YES	YES note: 7-Slot Chassis require PCI 2.1 Compliant Bridge Chips	YES
Beige G3 - 333/300/266/233 MHz (Tower/Desktop)	YES	NO Exception: 13-Slot chassis with S/N lower than NB0600100C are supported.	YES Exception: DD007-R are not supported	YES Exception: PCI-13R & PCI-6R are not supported	YES	YES Requires supported Chassis	NO Exception: 13-Slot chassis with S/N lower than NB0600100C are supported.	YES Exception: DD007-R are not supported note: 7-Slot Chassis require PCI 2.1 Compliant Bridge Chips	YES Exception: PCI-13R not supported
9600 - 350/300/233/200 MHz	YES	NO Exception: 13-Slot chassis with S/N lower than NB0600100C are supported.	YES Exception: DD007-R are not supported	YES Exception: PCI-13R & PCI-6R are not supported	YES	YES	NO Exception: 13-Slot chassis with S/N lower than NB0600100C are supported.	13-Slot Only	YES Exception: PCI-13R not supported
9500	YES	NO Exception: 13-Slot chassis with S/N lower than NB0600100C are supported.	YES Exception: DD007-R are not supported	YES Exception: PCI-13R & PCI-6R are not supported	YES Requires 150 MHz or Higher	YES Requires 150 MHz or Higher	NO	NO	NO

Exceptions that effect all the above Computers except the 9500 & 9600:

WARNING: If you install the AVoption boards (ABVB and Janus) in an SBS (Bit3) chassis, you run the serious risk of damaging the boards. SBS (Bit3) chassis may be used with AVoption only in a configuration with 9500 or 9600 computers, and when AVoption's two PCI boards (ABVB and Janus) are installed in the CPU. Refer to the AVoption user guide for precise installation instructions.

WARNING: SBS (Bit3) chassis are not supported in any configuration with AVoption|XL. If you install the AVoption|XL board (Meridien Digital Media Board) in an SBS (Bit3) chassis, you run the serious risk of damaging the board.

Optional SCSI HBA card bundle (by Apple): For maximum track count, this configuration requires use of a qualified SCSI HBA card. Optional SCSI HBA cards bundled (by Apple) with Power Macintosh computers are not compatible with this configuration due to the lack of NV RAM to store Pro Tools desired SCSI transfer rate.

When using HDT 2.5.3 or earlier with a qualified ATTO SCSI HBA card, Firmware v1.1.1 is required.

For Blue & White G3 and G4 computers, ATTO ExpressPro-Tools v2.3.2 or higher is required along with ATTO SCSI HBA card, Firmware v1.3.5 or higher. Please contact ATTO for the latest information. **Note:** Mac OS 9.2 requires ATTO ExpressPro-Tools v2.7 or higher, available at: http://www.attotech.com/software/

Radius VideoVision not supported: Radius VideoVision is incompatible with the optional video card included with some Beige G3 Power Macintoshes. Please contact Radius for the latest information.

Further Exceptions Apply: Please refer to the "Supported CPU Models, Speeds & Requirements" list back on the Pro Tools|24 Systems for Power Macintosh Requirements page for your chosen computer.

FilmFrame™v2.0

24P support with FilmFrame, Pro Tools and AVoption|XL

With AVoption | XL and FilmFrame installed, Pro Tools becomes the only audio workstation capable of importing and playing back 24P picture media. 24P technology enables multi-format delivery from a single 24P source, to meet multi-format, multi-version opportunities and challenges presented by DTV and HDTV.

Requirements for 24P support:

- Digidesign approved Macintosh Pro Tools TDM system
- Mac OS 9.1, 9.2, 9.2.1 or 9.2.2
- 256 MB Total System RAM (Recommended: 100 MB RAM allocated to the Pro Tools application)
- AVoption|XL
- Pro Tools 5.1.3
- FilmFrame v2.0 Key Disk
- Digidesign approved floppy drive (for installation of Key Disk authorization)

24 fps support with FilmFrame, Pro Tools® and AVoption

With AVoption and FilmFrame installed, Pro Tools becomes the only audio workstation capable of importing and playing back 24 fps picture media. FilmFrame will turn your Pro Tools system into the ultimate companion workstation to Avid's Academy Award-winning product line. Working with true 24 fps picture eliminates the guesswork and inaccuracies inherent when converting to other broadcast standards.

Requirements for 24 fps support:

- See compatibility requirements for AVoption
- FilmFrame v2.0 Key Disk if working with Pro Tools 5.1.3
- FilmFrame v2.0 is a free update for FilmFrame 1.0 owners. If you do not have a FilmFrame 2.0 key disk, please contact Digidesign Customer Support for your free disk.
- Digidesign approved floppy drive (for installation of Key Disk authorization)

24P vs. 24 fps:

AVoption can play 24 frames-per-second video clips created on an Avid ABVB system, but these clips are limited to single-field resolutions and display a more "compressed" image. AVoption|XL can play 24P video clips created on Avid Meridien systems. 24P video clips selectively blend both fields and can display an uncompressed image. FilmFrame 2.0 is required for 24 fps playback on AVoption and for 24P playback on AVoption|XL.





Get Power to burn with the latest Macs!

Go to the Apple Music & Audio website for info on upgrading your Mac audio workstation and the latest Mac audio happenings.

Power Macintosh G4 (AGP Graphics) - Pro Tools|24 & MIX Requirements

Apple G4 (AGP Graphics) Computers Supported:

Single Processor	Dual Processor *
350 MHz Power Mac G4	Dual 450 MHz Power Mac G4
400 MHz Power Mac G4	Dual 500 MHz Power Mac G4
450 MHz Power Mac G4	Dual 533 MHz Power Mac G4
466 MHz Power Mac G4	Dual 800 MHz Power Mac G4
500 MHz Power Mac G4	Dual 1 GHz Power Mac G4
533 MHz Power Mac G4	
667 MHz Power Mac G4	
733 MHz Power Mac G4 **	
800 MHz Power Mac G4	
867 MHz Power Mac G4	
933 MHz Power Mac G4	

^{*} Pro Tools currently does not utilize the second processor in Apple Dual Processor CPUs. If problems (such as -6042 errors) occur when using Pro Tools on a Dual Processor CPU,

Digidesign recommends the following: Move the folder named "Multiprocessing" from the System Folder "Extensions" folder to the "Extensions (Disabled)" folder and restart.

**Both models: early 733 with level 3 cache and Quicksilver 733 without level 3 cache.

Additional Information

- See the Digidesign 2001 & 2002 G4 Qualification Summary for additional details on newest models.
- See Apple's tech archive on how to differentiate between AGP Graphics and PCI Graphics G4 models at: http://www.info.apple.com/kbnum/n58418
- For current Apple computer models and specifications, see www.apple.com
- For other Apple computers and specifications, see www.everymac.com and www.applespec.com

Additional Requirements

Mac OS 9.0.4 (earlyG4 models) or 9.1 (5-slot models) or 9.2.x (Quicksilver models) required

- 5-slot 466 MHz, 533 MHz, 667 MHz, and 733 MHz (733 with level 3 cache) models require Mac OS 9.1 (pre-installed)
- Quicksilver 733 MHz (without level 3 cache), 867MHz, and Dual 800 MHz models require Mac OS 9.2, 9.2.1 or 9.2.2 (pre-installed)

ATTO ExpressPro-Tools v2.3.2 or higher required (supplied on Pro Tools v5.1 or 5.1.1 CD-ROM)

Note: Mac OS 9.2 requires ATTO ExpressPro-Tools v2.7 or higher, available at: http://www.attotech.com/software/

External Floppy Diskette Drive

Although not required with Pro Tools installation, an external floppy diskette drive may be required for some Plug-Ins installations. The following external USB diskette drives are currently supported:

- Imation SuperDisk
- NewerTechnology uDrive
- SmartDisk (VST) Floppy Drive (model FDUSB-M) Note: Information on VST brand products from SmartDisk can be found at: www.smartdisk.com

Links to software and drivers are available in the Digidesign Support/Downloads/Utilities Section:

- SmartDisk (VST) Floppy Drive (model FDUSB-M)
- Imation SuperDisk
- NewerTechnology uDrive
- PACE USB Floppy Enabler

Apple's revised USB support allows for booting from a USB drive, therefore you should not boot

up your system with an authorization disk inserted in the USB Drive.

SCSI HBA Cards:

For maximum track count, the G4 requires the use of a qualified SCSI HBA card. Optional SCSI HBA cards bundled (by Apple) with Power Macintosh computers are not compatible with this configuration due to the lack of NV RAM to store Pro Tools desired SCSI transfer rate. The following SCSI HBA cards are qualified with the G4s listed at the top of this page:

ATTO ExpressPCI SCSI HBA card EPCI-DC (ExpressPCI Dual Channel Ultra/WIDE HBA, also available in the Digidesign SCSI64 Kit) with the following requirements:

- ATTO ExpressPCI Firmware v1.4.4 f1 or higher
- Available at: http://www.digidesign.com/download/ptutil.html
- ATTO ExpressPro-Tools v2.3.2 or higher with Synch Transfer Rate set to 20 (10) and PCI Burst Rate set to 32 bytes
- ATTO ExpressPro-Tools v2.3.2 supplied on Pro Tools v5.1 or 5.1.1 installation CD-ROM
- **Note:** Mac OS 9.2 requires ATTO ExpressPro-Tools v2.7 or higher, available at: http://www.attotech.com/software/

MIDI

Both USB and serial MIDI interfaces work effectively with Pro Tools. Digidesign recommends using a serial MIDI interface, as they offer the tightest possible MIDI timing. Serial MIDI interfaces require either a Mac serial port or a qualified modem-to-serial port adapter. Digidesign currently supports the GeeThree Stealth Port for G4 - AGP Video (Sawtooth), Stealth Port for Dual Processor G4s or Griffin g4Port installed in the modem port (thereby not using a PCI slot).

When using the GeeThree products with OS 9.0.4, version 1.0.3 or higher of the Stealth Port extension is required, available here: http://www.geethree.com/download.html

Digidesign supports the following MIDI Interfaces for use with the 2001 models of Apple's G4s and Pro Tools® 5.1.1:

- MOTU Fastlane (USB)
- Opcode MIDIport32 2x2 (USB)
- Emagic AMT8 (USB/Serial)

While full testing will not be performed with older Pro Tools versions or older CPUs, we do not anticipate problems using these MIDI Interfaces.

Dual Monitor AGP Graphics Cards

- Appian Jeronimo[™]2000 Macintosh (with version 1.4.1 drivers and the included firmware update. additional notes)
- ProMax DH-Max (disable ProMax drivers when using with Pro Tools. Both monitors set to "thousands of colors" instead of 256. Not yet qualified with 13-slot chassis)
- NVIDIA GeForce4 MX (as shipped from Apple standard on the 933 MHz & Dual 1 GHz Power Mac G4 models)
- ATI Radeon 7500 (as shipped from Apple standard on the 800 MHz Power Mac G4)

Note: As of March 2002, the upcoming NVIDIA GeForce4 Titanium built-to-order option from Apple not yet shipping or tested.

* ProMax DH-Max Notes: Occasionally when booting a system with the ProMax DH-Max dual monitor card, the top portion of the monitors are black, the apple menu bar appears in the middle of the screen, the bottom portion of the desktop is unreachable, or the desktop may be offset to one side. A reboot will usually solve this problem. Otherwise, you can open the Monitor control panel and rearrange the monitors.

DSP Farm and SampleCell II Support:

The PCI Matchmaker chip on a DSP Farm must be rev QC or QE (check the end of the line directly below "PCI Matchmaker" on the chip) to be compatible. Cards with rev Q chips can be upgraded.

d24 Support:

Some d24 cards may experience recognition problems in the 400 MHz Blue & White G3 or G4s with AGP Graphics. If so, please contact your local Digidesign office.



Power Macintosh G4 (PCI Graphics) - Pro Tools|24 Requirements

G4 (PCI Graphics) Processors of all speeds supported

See Apple's tech archive for more info on how to differentiate between AGP Graphics and PCI Graphics G4 models at: http://www.info.apple.com/kbnum/n58418

Power Macintosh G4 version history available at www.everymac.com

Mac OS 9.0.4 required (OS 9.1 not tested with these models)

QuickTime 4.1.2 required with Pro Tools v5.1.1 (included with Mac OS 9.0.4, Pro Tools installation CD, or download the standalone QuickTime 4.1.2 Installer from Apple)

Power Mac G4 ROM 1.8.1 Update required

Available from Apple at: http://asu.info.apple.com/swupdates.nsf/artnum/n11533

ATTO ExpressPro-Tools v2.3.2 required (supplied on Pro Tools v5.1 and 5.1.1 CD-ROM)

External Floppy Diskette Drive

Although not required with Pro Tools installation, an external floppy diskette drive may be required for some Plug-Ins installations. The following external USB diskette drives are currently supported:

- Imation SuperDisk
- NewerTechnology uDrive
- SmartDisk (VST) Floppy Drive (model FDUSB-M) Note: Information on VST brand products from SmartDisk can be found at: www.smartdisk.com

Links to software and drivers are available in the Digidesign Support/Downloads/Utilities Section:

- SmartDisk (VST) Floppy Drive (model FDUSB-M)
- Imation SuperDisk
- NewerTechnology uDrive
- PACE USB Floppy Enabler

Apple's revised USB support allows for booting from a USB drive, therefore you should not boot up your system with an authorization disk inserted in the USB Drive.

SCSI HBA Cards:

For maximum track count, the G4 requires the use of a qualified SCSI HBA card. Optional SCSI HBA cards bundled (by Apple) with Power Macintosh computers are not compatible with this configuration due to the lack of NV RAM to store Pro Tools desired SCSI transfer rate. The following SCSI HBA cards are qualified with the G4s listed at the top of this page:

ATTO ExpressPCI SCSI HBA card EPCI-DC (ExpressPCI Dual Channel Ultra/WIDE HBA, also

available in the Digidesign SCSI64 Kit) with the following requirements:

- ATTO ExpressPCI Firmware v1.4.4 f1
- Available at: http://www.digidesign.com/download/ptutil.html
- ATTO ExpressPro-Tools v2.3.2 or higher with Synch Transfer Rate set to 20 (10) and PCI Burst Rate set to 32 bytes
- ATTO ExpressPro-Tools v2.3.2 supplied on Pro Tools v5.1 or 5.1.1 installation CD-ROM
- **Note:** Mac OS 9.2 requires ATTO ExpressPro-Tools v2.7 or higher, available at: http://www.attotech.com/software/

MIDI: Both USB and serial MIDI interfaces work effectively with Pro Tools. Digidesign recommends using a serial MIDI interface, as they offer the tightest possible MIDI timing. Serial MIDI interfaces require either a Mac serial port or a qualified modem-to-serial port adapter. Digidesign currently supports the **GeeThree Stealth Port** or **Griffin gPort** installed in the modem port (thereby not using a PCI slot).

When using the GeeThree products with OS 9.0.4, version 1.0.3 or higher of the Stealth Port extension is required, available here: http://www.geethree.com/download.html

DSP Farm and SampleCell II Support: The PCI Matchmaker chip on a DSP Farm must be rev QC or QE (check the end of the line directly below "PCI Matchmaker" on the chip) to be compatible. Cards with rev Q chips can be upgraded.



Power Macintosh Blue & White G3 - Pro Tools|24 Requirements

Blue & White G3 Processors of all speeds supported

Mac OS 9.0.4 required (OS 9.1 not tested with these models)

QuickTime 4.1.2 required with Pro Tools v5.1.1 (included with Mac OS 9.0.4, Pro Tools installation CD, or download the standalone QuickTime 4.1.2 Installer from Apple)

G3 Firmware Update 1.1 required

Available from Apple at: http://asu.info.apple.com/swupdates.nsf/artnum/n11361

ATTO ExpressPro-Tools v2.3.2 required (supplied on Pro Tools v5.1 and 5.1.1 CD-ROM)

External Floppy Diskette Drive

Although not required with Pro Tools installation, an external floppy diskette drive may be required for some Plug-Ins installations. The following external USB diskette drives are currently supported:

- Imation SuperDisk
- NewerTechnology uDrive
- SmartDisk (VST) Floppy Drive (model FDUSB-M) Note: Information on VST brand products from SmartDisk can be found at: www.smartdisk.com

Links to software and drivers are available in the Digidesign Support/Downloads/Utilities Section:

- SmartDisk (VST) Floppy Drive (model FDUSB-M)
- Imation SuperDisk
- NewerTechnology uDrive
- PACE USB Floppy Enabler

Apple's revised USB support allows for booting from a USB drive, therefore you should not boot up your system with an authorization disk inserted in the USB Drive.

SCSI HBA Card:

For maximum track count, the Blue & white G3 requires the use of a qualified SCSI HBA card. Optional SCSI HBA cards bundled (by Apple) with Power Macintosh computers are not compatible with this configuration due to the lack of NV RAM to store Pro Tools desired SCSI transfer rate. The following SCSI HBA cards are qualified for use with Blue & White G3s:

ATTO ExpressPCI SCSI HBA card EPCI-DC (ExpressPCI Dual Channel Ultra/WIDE HBA, also available in the Digidesign SCSI64 Kit) with the following requirements:

• ATTO ExpressPCI Firmware v1.4.4 f1

- Available at: http://www.digidesign.com/download/ptutil.html
- ATTO ExpressPro-Tools v2.3.2 or higher with Synch Transfer Rate set to 20 (10) and PCI Burst Rate set to 32 bytes
- ATTO ExpressPro-Tools v2.3.2 supplied on Pro Tools v5.1 or 5.1.1 installation CD-ROM
- **Note:** Mac OS 9.2 requires ATTO ExpressPro-Tools v2.7 or higher, available at: http://www.attotech.com/software/

—OR —

Adaptec Power Domain SCSI HBA cards including:

- 2940UW
- 3940UW

with the following requirements:

- Firmware v4.1
- PowerDomain Control v5.1 with cards set to "Fast-SCSI:10" in the Control Panel
- Current Adaptec drivers are available at: http://www.adaptec.com/worldwide/support/driverindex.html
- Previous drivers are available at: ftp.adaptec.com/mac/scsi/

MIDI: Both USB and serial MIDI interfaces work effectively with Pro Tools. Digidesign recommends using a serial MIDI interface, as they offer the tightest possible MIDI timing. Serial MIDI interfaces require either a Mac serial port or a qualified modem-to-serial port adapter. Digidesign currently supports the **GeeThree Stealth Port** or **Griffin gPort** installed in the modem port (thereby not using a PCI slot).

When using the GeeThree products with OS 9.0.4, version 1.0.3 or higher of the Stealth Port extension is required, available here: http://www.geethree.com/download.html

DSP Farm and SampleCell II Support: The PCI Matchmaker chip on a DSP Farm must be rev QC or QE (check the end of the line directly below "PCI Matchmaker" on the chip) to be compatible. Cards with rev Q chips can be upgraded.

d24 Support: Some d24 cards may experience recognition problems in the 400 MHz Blue & White G3 or G4s with AGP Graphics. If so, please contact your local Digidesign office.



Power Macintosh 9500 & 9600 - Pro Tools|24 Requirements

Power Macintosh 9600 Processors 200 MHz or higher speed supported, excluding Multiprocessor (MP) version

Power Macintosh 9500 Processors of all speeds supported, excluding Multiprocessor (MP) version

Mac OS 9.0.4 required (OS 9.1 not tested with these models)

QuickTime 4.1.2 required with Pro Tools v5.1.1 (included with Mac OS 9.0.4, Pro Tools installation CD, or download the standalone QuickTime 4.1.2 Installer from Apple)

SCSI HBA Card:

For maximum track count, the Power Macintoshes requires the use of a qualified SCSI HBA card. Optional SCSI HBA cards bundled (by Apple) with Power Macintosh computers are not compatible with this configuration due to the lack of NV RAM to store Pro Tools desired SCSI transfer rate. The following SCSI HBA cards are qualified for use with Power Macintosh 9500s & 9600s:

ATTO ExpressPCI SCSI HBA cards including:

PSC (ExpressPCI Single Channel Ultra/WIDE HBA)

ATTO ExpressPCI SCSI HBA card EPCI-DC (ExpressPCI Dual Channel Ultra/WIDE HBA, also available in the Digidesign SCSI64 Kit)

With the following requirements:

- ATTO ExpressPCI Firmware v1.4.4 f1
- ExpressPro-Tools v2.3.2 with Synch Transfer Rate set to 20 (10) and PCI Burst Rate set to 32 bytes
- ATTO ExpressPCI Firmware v1.4.4 f1 is available at: http://www.digidesign.com/download/ptutil.html
- ATTO ExpressPro-Tools v2.3.2 (inluded on the Pro Tools 5.1 and 5.1.1 CD)

-OR -

Adaptec Power Domain SCSI HBA cards including:

- 2940UW
- 2940U2W

. 3940UW

with the following requirements:

- Firmware v4.1
- PowerDomain Control v5.1 with cards set to "Fast-SCSI: 10" in the Control Panel
- Current Adaptec drivers are available at: http://www.adaptec.com/worldwide/support/driverindex.html
- Previous drivers are available at: ftp.adaptec.com/mac/scsi/

Expansion Chassis:

SBS (Bit3) 7-Slot Expansion Chassis must use IBM PCI 2.1 compliant Bridge chips, with host card that starts with 20-101





Get Power to burn with the latest Macs!

Go to the Apple Music & Audio website for info on upgrading your Mac audio workstation and the latest Mac audio happenings.

Pro Tools® Requirements for Avid Unity™MediaNet

Avid Unity MediaNet is a shared storage solution for Avid and Pro Tools workstations. For a full description of the Avid Unity line of products, please go to:

www.avid.com/products/unitymedianet

Slot Order

For slot order using AVoption|XL with Avid Unity MediaNet and the Digidesign 13 Slot or Magma 13 Slot Chassis, please refer to the Pro Tools Unity Client Configuration

Hardware Requirements

Avid Unity MediaNet is supported by Pro Tools MIX systems running only on the following hardware:

Apple G4 With AGP Graphics Computers Supported:

Single Processor	Dual Processor *
450 MHz PowerPC G4	Dual 533 MHz PowerPC G4
466 MHz PowerPC G4	Dual 800 MHz PowerPC G4
500 MHz PowerPC G4	
533 MHz PowerPC G4	
667 MHz PowerPC G4	
733 MHz PowerPC G4	
867 MHz PowerPC G4	

System RAM

- 384 MB minimum, 512 MB recommended
- Pro Tools application "Preferred" memory set to 200 MB
- DAE "Preferred" memory set to 100 MB

Avid Components

Fibre Channel Cards	Avid Part Number
JNI FCE3210C (Copper)	0010-03772-01
JNI FCE3210N (Optical)	0010-03773-01
GBICs	Avid Part Number
Finisar FCM-8519-T4 (Copper)	0070-03034-01
IBM 42S10SNNAA20 (Optical)	0070-03035-01
Switches	Avid Part Number
Vixel 4000 8-Port	0740-03001-01 (MediaNet 1.2.2 ONLY)
Vixel 8100 8-Port	0740-03002-01
Vixel 7100 8-Port	0010-03571-01

AVoption|XL

Vixel 7200 16-Port

- AVoption XL is supported for use with Avid Unity MediaNet
- When used with Avid Unity MediaNet, AVoption XL requires either the Digidesign 13 Slot or Magma 13 Slot Chassis.

0010-03940-01

- For slot order using AVoption | XL with Avid Unity MediaNet and the Digidesign 13 Slot or Magma 13 Slot Chassis, please refer to the Pro Tools Unity Client Configuration
- AVoption is not supported with Avid Unity MediaNet

Software Requirements

- Pro Tools 5.1.3, running on Mac OS 9.1 or 9.2.x
- Pro Tools 5.1.3 supports Avid Unity MediaNet 1.2.2, 2.0, 2.1, 2.2, and 2.2.1
- Pro Tools 5.1.3 supports Avid Unity MediaManager 2.5

If you are currently using Pro Tools 5.1U, please contact Digidesign Customer Support for a free upgrade to Pro Tools 5.1.3.

Maximum Number of Clients

A MediaNet for Pro Tools workgroup can support the following number of clients:

- Up to four Composer Products clients using dual-stream 1:1 video with one Pro Tools client with AVoption|XL using single-stream 1:1 video
- Up to four Composer Products clients using dual-stream 1:1 video with up to three Pro Tools clients with AVoption|XL using single-stream 3:1 or lower video
- Up to nine Composer Products clients using single-stream 3:1 video with up to three Pro Tools clients with AVoption|XL using single-stream 3:1 or lower video
- Up to six Composer Products clients using single-stream 10:1 video and up to two Composer Products clients using dual-stream 1:1 video with up to three Pro Tools clients with AVoption | XL using single-stream 10:1 or lower video

Other configurations of MediaNet for Pro Tools will be made available as they are tested.

* Pro Tools currently does not utilize the second processor in Apple Dual Processor CPUs. If problems (such as -6042 errors) occur when using Pro Tools on a Dual Processor CPU, Digidesign recommends the following: Move the folder named "Multiprocessing" from the System Folder "Extensions" folder to the "Extensions (Disabled)" folder and restart.



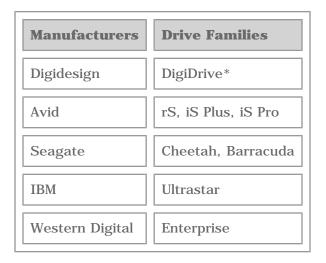
Pro Tools TDM Hard Drive Minimum Requirements

To provide full 64 track, 24 bit, 48 kHz performance a TDM Pro Tools system must include at least two hard drives, minimum, three recommended. For 64 track sessions that have substantial edit densities (such as one edit every third of a second across 64 voices) or large amounts of crossfades, up to four drives may be required, allocated with 16 tracks per drive and two drives per SCSI channel. Additionally, these drives must meet the following requirements:

Minimum Drive Requirements

- SCSI interface: Wide single-ended or low-voltage differential (LVD or Ultra 160)
- Disk drive rotational speed: 7200 RPM or faster
- Buffer Size: 512K or larger
- Drives must be dedicated for audio (internal or external)
- Mac OS file system: HFS or HFS+. Drives should be initialized with ATTO ExpressPro-Tools v2.3.2 or higher, available at: http://www.attotech.com/software/
- Note: Mac OS 9.2 requires ATTO ExpressPro-Tools v2.7 or higher, available at: http://www.attotech.com/software/
- If using non-ATTO ExpressPro-Tools initialized drives, click here for options
- Windows 2000 file system: FAT32, FAT16, or NTFS. Drives should be formatted with Windows 2000 disk administration software. HFS or HFS+ supported when used with MacOpener v5.0

Hard Drive Families from the following Manufacturers are recommended:



^{*} First generation DigiDrives are not supported in LVD mode

To check supported SCSI HBA cards for specific Mac computer models, click here.

IDE/ATA Hard Drives

IDE/ATA drives meeting the requirements at this link are now qualified for 32 track performance with Mac TDM systems.

Firewire Hard Drives

The DigiDrive FireWire 80 has been qualified with Pro Tools 24 MIX systems for the following:

- Supported track count (per drive): 24 tracks per drive at 48 KHz/24-bit @ 500ms edit density
- Maximum 2 drives for a total of 48 tracks

For more information and specific requirements, see DigiDrive FireWire 80 Requirements

Drive Space Required

- Mono, 16-bit, 44.1 kHz audio requires approximately 5 MB/minute disk space
- Mono, 24-bit, 44.1 kHz audio requires approximately 7.5 MB/minute disk space

Notes

- Pro Tools has a single audio file size limit of 2048MB, even when used with Mac OS 9.x and the HFS+ file system. This equates to about 4.5 hours at 24-bit, 44.1 kHz.
- High Speed Drives require manufacturer-approved enclosure to ensure correct heat dissipation, required for sustained drive reliability
- Pro Tools III Disk I/O: Wide drives require cable adapter, such as Avid PN 0070-00469-01 (12" 50-pin female Centronics to 68-pin male high-density)
- Pro Tools III Disk I/O: Some 3rd Generation LVD DigiDrives and LVD hard drives from other storage manufacturers will not mount when connected to a Pro Tools III Disk I/O. Digidesign has confirmed that 3rd Generation LVD DigiDrives containing mechanism model numbers beginning with "ST" will function correctly. DigiDrives with mechanism model numbers beginning with "D" will NOT function correctly. The DigiDrive's mechanism model number can be viewed during initialization within your drive formatting software. Note that the new 4th Generation Ultra160/LVD DigiDrives do not have this incompatibility and are qualified to work with Pro Tools III Disk I/Os.



AVoption Requirements

Please Note: AVoption has unique compatibility requirements. If the information on this page appears to contradict information listed elsewhere in these Compatibility Documents, please adhere to the information listed on this page when configuring a system which includes AVoption.

Important Information: (repeated below) For updated slot order information with the latest qualified configurations, refer to the **AVoption & AVoption XL Guide** in the **Technical Documents Library** of the Support/Tech Support section of the website. See also the **Supported Optional Expansion Chassis** web pages for further compatibility information when used with Pro Tools|24 MIX Expanded Systems or Pro Tools|24 Expanded Systems.

Digidesign PCI Cards Supplied with System

- ABVB Card
- Janus Card

Digidesign Software Supplied with System

- **Pro Tools**® 5.1.3
- **AVoption Software** (provided on separate CD)
- DigiTranslator 2.0™ more information on DigiTranslator

Required Hardware Components (not supplied)

- Pro Tools | 24, Pro Tools | 24 MIX, Pro Tools | 24 MIXplus or Pro Tools | 24 MIX³ based system
- Universal Slave Driver (USD)
- ATTO ExpressPCI Dual Channel Ultra/WIDE SCSI HBA card (EPCI-DC). This card is available from Digidesign in the SCSI64 Kit. This is the only SCSI card currently qualified for use with AVoption.

Optional Software

• **FilmFrame**[™] – FilmFrame is a software option for AVoption that enables support for import and playback of 24 frame Film Composer media. FilmFrame requires AVoption to be installed.

more information on FilmFrame™

Supported CPU Models, Speeds & Requirements

- Power Macintosh G4 (AGP graphics)
- Power Macintosh G4 (PCI graphics)
- Power Macintosh Blue & White G3
- Power Macintosh 9500 or 9600*

*AVoption has been tested with Apple Macintosh 9500 CPU with processor speeds as low as 150 MHz. The overall performance of your Pro Tools system will be greatly improved with higher-speed CPU's. For optimal responsiveness, we strongly recommend you use a CPU with at least 300 MHz clock speed with AVoption. With the 9500 and 9600 CPU, it is required that the ABVB and Janus boards be mounted inside the CPU, not in an expansion chassis.

Note: The Power Macintosh Beige G3 is not officially qualified with AVoption.

RAM Requirements:

- Total System RAM Minimum 256 MB
- Pro Tools Preferred Allocation 100 MB
- DAE Preferred Allocation 60 MB

Expansion Chassis

- Important Compatibility Documents: For updated slot order information with the latest qualified configurations, refer to the AVoption & AVoption XL Guide in the Technical Documents Library of the Support/Tech Support section of the website. See also the "Supported Optional Expansion Chassis" web pages for further compatibility information when used with Pro Tools|24 MIX Expanded Systems or Pro Tools|24 Expanded Systems.
- **Important Cooling Issue:** If you install the AVoption PCI boards (ABVB and Janus) in either the Digidesign 13-slot or Magma chassis that is older than rev G models, you must install the additional cooling fan (Digidesign part number MC201) in the chassis. The newer rev G Digidesign & Magma 13 slot chassis (identified by serial numbers that end in "00G") no longer require a fan kit with AVoption.
- **WARNING:** If you install the AVoption boards (ABVB and Janus) in an SBS (Bit3) chassis, you run the serious risk of damaging them. SBS (Bit3) chassis may be used with AVoption only in a configuration with 9500 or 9600 computers, and when AVoption's two PCI boards (ABVB and Janus) are installed in the CPU. Refer to the AVoption user guide for precise installation instructions.

Drive Compatibility

 Audio Drives: AVoption can be configured with any audio drives qualified for use with Pro Tools in general. Refer to the Pro Tools TDM Hard Drive Minimum Requirements page for details.

- **Video Drives:** Avid rS drives, iS Pro drives, iS Plus drives or DigiDrives. At this time, the Avid MediaDock is not officially qualified for use with AVoption.
- **About Firewire Drives:** The DigiDrive FireWire 80 (as well as other firewire drives) are not qualified for use with AVoption or AVoption|XL. AVoption and AVoption|XL require SCSI storage for recording and playback. However, you can use the DigiDrive FireWire 80 to back-up your video storage SCSI drives.

Third Party Video Capture Cards: The Pinnacle miroMotion DC30 Plus QuickTime capture card (with firmware v1.2.1) is not officially qualified for use with AVoption, but it does appear to coexist with the ABVB/Janus cards in Digidesign's limited investigations. Your results may vary from these findings. Software for the miroMotion DC30 Plus can be found in the Digidesign Support/Downloads/Utilities section of the website.

Dual Screen Monitor Cards: Currently, the only Dual Screen Monitor Card qualified for use with AVoption is the Appian Jeronimo 2000 AGP for Macintosh. This is a single AGP card which can drive two VGA monitors. This card is currently qualified only for use with single-processor G4 computers with AGP graphics systems. The PCI version of this card is not supported.

For more information see the Appian page in the Digidesign Support / Downloads section

Maximum Performance Guidelines

Compatible Dual-Channel SCSI HBA card

Total System RAM: Minimum 256 MB

Note: AVoption supports "plug and play" compatibility with many Avid systems. When "inheriting" a drive containing audio and video data from an Avid system, we recommend you connect this drive to the SCSI channel dedicated to video storage. There is no need to copy the audio data from such a drive to your dedicated audio drives, however we recommend that you not record any additional audio tracks onto this drive.

Virtually all the testing for AVoption was done with a baseline of 32 tracks of 24- bit/48k audio and one stream of AVR77 video data (record and/or playback). These test configurations generally included one drive for every 16 tracks of audio. One way to achieve higher track counts is to dedicate more drives to the audio tracks.

On a supported configuration, you should be able to easily achieve this performance baseline, even with a high degree of edit density on each track. The higher the edit density, the more heavily taxed will be the storage subsystem.

You may find much better results than this baseline, since Digidesign's performance tests re designed to stress the storage subsystem more heavily than the average "real world" usage. In several cases, our test group was able to continuous record or playback of 64 audio tracks and AVR77 picture simultaneously.

There are other possible steps that can be taken to maximize the performance of a Pro Tools system with AVoption consult the User Guide or Release Bulletin (available for download as a PDF here) for the latest information



Power Macintosh Beige G3 - Pro Tools|24 Requirements

Beige G3 Processors of all speeds supported

Mac OS 9.0.4 required (OS 9.1 not tested with these models)

QuickTime 4.1.2 or higher required with Pro Tools v5.1.1 (QT v4.1.2 included with Mac OS 9.0.4, Pro Tools installation CD, or download the standalone QuickTime 4.1.2 Installer from Apple. QuickTime 5.0.2 is also qualified)

SCSI HBA Card:

For maximum track count, the G3 requires the use of a qualified SCSI HBA card. Optional SCSI HBA cards bundled (by Apple) with Power Macintosh computers are not compatible with this configuration due to the lack of NV RAM to store Pro Tools desired SCSI transfer rate. The following SCSI HBA are qualified for use with Beige G3s:

ATTO ExpressPCI SCSI HBA cards including:

PSC (ExpressPCI Single Channel Ultra/WIDE HBA)

EPCI-DC (ExpressPCI Dual Channel Ultra/WIDE HBA, also available in the Digidesign SCSI64 Kit)

with the following requirements:

- ATTO ExpressPCI Firmware v1.4.4 f1
- ATTO ExpressPro-Tools v2.3.2 with Synch Transfer Rate set to 20 (10) and PCI Burst Rate set to 32 bytes
- ATTO ExpressPCI Firmware v1.4.4 f1 is available at: http://www.digidesign.com/download/ptutil.html
- ATTO ExpressPro-Tools v2.3.2 is included on Pro Tools Installation CD

-OR -

Adaptec Power Domain SCSI HBA cards including:

- 2940UW
- 2940U2W
- 3940UW

with the following requirements:

- Firmware v4.1 or higher
- PowerDomain Control v5.1 or higher with cards set to "Fast-SCSI:10" in the Control Panel
- Current Adaptec drivers are available at: http://www.adaptec.com/worldwide/support/driverindex.html
- Previous drivers are available at: ftp.adaptec.com/mac/scsi/

Radius VideoVision:

Radius VideoVision is incompatible with the optional video card included with some G3 Power Mac models.



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Apple Titanium PowerBook G4 - Pro Tools 24 MIX & MIXplus Requirements

Apple Titanium PowerBook G4 Computers Supported:

400 MHz PowerBook G4

500 MHz PowerBook G4

Magma 2 Slot CardBus PCI Expansion System

The Magma 2 Slot CardBus PCI Expansion System and Apple Titanium PowerBook G4 are now Digidesign approved with Pro Tools 24 MIX & MIXplus systems.

System details:

- Computer: Apple Titanium PowerBook G4, 256MB RAM, OS 9.1
- Chassis: Magma 2 Slot CardBus chassis, Model CB2S & CB2SDC (includes the ATTO ExpressPCI UL2S SCSI HBA)
- Hard Drives: Two Digidesign approved SCSI drives for maximum track count

Track Count:

- MIX or MIXplus with Pro Tools v5.1.1 Support for up to 30 tracks of playback and record
- Track count is based on tests using 24-bit/48kHz audio with 300ms edits across all tracks.
- Track count will increase as bit /sample rates and edit density are decreased.

EIDE drives and Firewire drives have not been qualified with this configuration.

Magma 4 Slot CardBus PCI Expansion System

The Magma 4 Slot CardBus PCI Expansion System and Apple Titanium PowerBook G4 are now Digidesign approved with Pro Tools | 24 MIX, MIXplus & MIX³ systems.

System details:

- Computer: Apple Titanium PowerBook G4, 256MB RAM, OS 9.1
- Chassis: Magma 4 Slot CardBus chassis, Model CB4DRQ-D1 with the ATTO ExpressPCI UL2S SCSI HBA (with firmware v1.6.3)
- Hard Drives: Two Digidesign approved SCSI drives for maximum track count

Track Count:

- MIX, MIXplus or MIX³ with Pro Tools v5.1.1 Support for up to 30 tracks of playback and record
- Track count is based on tests using 24-bit/48kHz audio with 300ms edits across all tracks.
- Track count will increase as bit /sample rates and edit density are decreased.

EIDE drives and Firewire drives have not been qualified with this configuration.

Additional Requirements:

Mac OS 9.1 required

- PowerBook G4 400 MHz and 500 MHz models require Mac OS 9.1 (included with PowerBook G4)
- OS X is not supported with Pro Tools

SCSI HBA Card required:

The following SCSI HBA card is qualified with the Apple Titanium PowerBook G4/Magma configuration:

ATTO ExpressPCI Single-Channel Ultra2/WIDE UL2S

- The Magma 2 Slot Expansion System is available in two approved models. Magma models CB2S & CB2SDC include the ATTO ExpressPCI Single-Channel Ultra2/WIDE UL2S model Ultra2 SCSI controller with internal and external connector:
- CB2S 2 Slot CardBus PCI Expansion System with integrated SCSI Controller Card (90W power supply)

- CB2SDC 2 Slot CardBus PCI Expansion System with integrated SCSI Controller Card, XLR DC Power Connector, (100W external power supply)
- Note: 2 other Magma 2 slot models, the CB2 & CB2DC, do not include an integrated SCSI controller and are not approved for use with MIX or MIXplus systems without the addition of the ATTO ExpressPCI Single-Channel Ultra2/WIDE UL2S.
- The Magma 4 Slot CardBus chassis, Model CB4DRQ-D1, plus the ATTO ExpressPCI UL2S SCSI HBA (with firmware v1.6.3) for compatibility. (standard chassis does not ship with an integrated SCSI controller, but Magma can add the ATTO card to your custom order)

Atto Software & Settings

- ATTO ExpressPro-Tools v2.3.2 or higher with Synch Transfer Rate set to 20 (10) and PCI Burst Rate set to 32 bytes, supplied on Pro Tools 5.1.1 CD, or available at: http://www.attotech.com/software/
- **Note:** Mac OS 9.2 requires ATTO ExpressPro-Tools v2.7 or higher, available at: http://www.attotech.com/software/

External Diskette Drive

Although not required with Pro Tools installation, a Digidesign-qualified external diskette drive may be required for installation of some plug-ins and optional software applications.

MIDI:

Both USB and serial MIDI interfaces work effectively with Pro Tools. Digidesign recommends using a serial MIDI interface, as they offer the tightest possible MIDI timing. Serial MIDI interfaces require a USB-to-serial port adapter, such as the Keyspan USB Twin Serial Adapter.

Digidesign supports the following MIDI Interfaces for use with the Apple Titanium PowerBook G4 and Pro Tools® 5.1.1:

- MOTU Fastlane (USB)
- MIDIport32 2x2 (USB)
- AMT8 (USB/Serial)

IDE/ATA Hard Drives

• EIDE drives have not been qualified with this configuration.

Firewire Hard Drives

• Firewire drives have not been qualified with this configuration. See DigiDrive FireWire 80 Requirements





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Mac OS Requirements —Pro Tools v5.1.1

Approved Mac Operating Systems

- Pro Tools 5.1.1 has been tested and approved on Mac OS 9.0.4 and 9.1. Mac OS 9.2, 9.2.1, and 9.2.2 have been tested and approved on the Quicksilver 2001 G4 models only. (see Known Issues at the bottom of this page)
- For specific compatibility information, click on the links for a particular computer model and Pro Tools system.
- Newer G4 models (AGP graphics slot + 4 PCI slots = 5 slots total) require Mac OS 9.1 on the early addition 5 slot models or Mac OS 9.2/9.2.1/9.2.2 on the Quicksilver 5 slot models.
- To update from OS 9 to 9.1 or 9.2.1, go to www.info.apple.com/export
- To update from OS 9.2 to 9.2.2, go to www.info.apple.com/support/downloads.html or by using the Software Update Control Panel

Settings & Requirements

- Mac OS Base Extension set and Digi System extensions (See Pro Tools Mac FAQ #1 for more information)
- Set default cache (in the Memory Control Panel) to "Custom, 512k"
- Set Energy Saver Control Panel to "Never"
- In the Appearance Control Panel, disable "Smooth All Fonts On Screen" and change system font to other than "Charcoal"
- If Norton Utilities is used it must be Norton Utilities v4.0 or higher to ensure compatibility with HFS+

Special Notes for OS 9 users:

- Pro Tools 5.0 or higher and DAE/DSI 5.0 or higher are required with Mac OS 9.0 or higher.
- The Digidesign Control Panel requires OS 9.0 or higher When using Digidesign Control Panel, turn off Platinum Sounds in the Appearance Control Panel
- Firmware v1.1 required for Blue & White G3 computers running OS 9.0 or higher. Available from Apple at: http://www.info.apple.com/kbnum/n58374

Known Issues:

- 1. The "Quicksilver" G4 models require OS 9.2, 9.2.1, or 9.2.2 to run Pro Tools. Users should not attempt to install OS 9.1, or run OSX, (including Classic mode), with Pro Tools on these machines. The Quicksilver G4 models have been tested with the Mac OS as shippped from Apple on these machines, with a dual boot system which includes both OS 9.2.x and OS X. It is absolutely necessary to boot from OS 9.2.x in order to run Pro Tools. Although you cannot use Pro Tools with OS X or in "Classic" mode under OS X, it is not necessary to remove OS X from these "Quicksilver" G4 computers.
- 2. Additional Mac OS Notes: Mac OS 9.2, 9.2.1, and 9.2.2 have only been tested with the Quicksilver G4 models. Earlier models that do not require OS 9.2 have not been tested for compatibility with Mac OS 9.2 or higher. In addition, you should not install OS X on the same partition or hard drive with Mac OS 9.x that you use as your startup drive for Pro Tools on pre-Quicksilver G4 models.
- 3. **Pro Tools currently does not utilize the second processor in dual processor Power Mac G4 models**. If problems (such as -6042 errors) occur when using Pro Tools on one of these machines, Digidesign recommends the following: Move the folder named "Multiprocessing" from the System Folder "Extensions" folder to the "Extensions (Disabled)" folder and restart.
- 4. On some G4 models running OS 9.2, 9.2.1 or 9.2.2, graphics in the Fades window may appear in the wrong color, or the fade lines may be invisible. Clicking outside the Fade window causes the window to redraw with the correct colors.
- 5. When running DigiTest v5.1.1 on the 867 MHz and 800 MHz dual-processor models, DigiTest reports a configuration problem if the ATTO Express PCI DC is installed. An erroneous error occurs when it scans the ATTO Express PCI DC (SCSI HBA card), however the card passes if you continue the test. This problem does not occur when running DigiTest on the 733 MHz model.

See Apple's tech archive on how to differentiate between AGP Graphics and PCI Graphics G4 models at: www.info.apple.com/kbnum/n58418

Power Macintosh version history and specifications are available at www.everymac.com and www.applespec.com





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Digidesign 2001 G4 Qualification

For information on the single processor 800 MHz Power Mac G4, 933 MHz Power Mac G4, and Dual 1-GHz PowerPC G4 models announced by Apple in January 2002, see the 2001 & 2002 G4 Qualification Summary

Status Report - October 4, 2001

Does not contain information on Pro Tools | HD or Mbox systems, released in 2002

Qualification Announcement For Apple's 2001 Power Mac G4 (Quicksilver)

- 733 MHz Power Mac G4 (2nd generation, does not have level 3 cache)
- 867 MHz Power Mac G4
- Dual 800 MHz Power Mac G4

Apple's Latest Power Mac G4 models have officially been qualified by Digidesign for use with the products listed below. Additional Computer Requirements, (System RAM, etc.,) as listed on the Digidesign Compatibility Documents remain the same, with the exception of Mac OS as detailed in the following section.

Known Issues:

- 1. The "Quicksilver" G4 models require Mac OS 9.2, 9.2.1 or 9.2.2 to run Pro Tools. Users should not attempt to install OS 9.1, or run OSX, (including Classic mode), with Pro Tools on these machines. The Quicksilver G4 models have been tested with the Mac OS as shippped from Apple on these machines, with a dual boot system which includes both OS 9.2.x and OS X. Although you cannot use Pro Tools with OS X, it is not necessary to remove OS X from these computers. *
- 2. Pro Tools currently does not utilize the second processor in dual processor Power Mac G4 models. If problems (such as -6042 errors) occur when using Pro Tools on one of these machines, Digidesign recommends the following: Move the folder named "Multiprocessing" from the System Folder "Extensions" folder to the "Extensions (Disabled)" folder and restart.
- 3. When running DigiTest v5.1.1 on the 867 MHz and 800 MHz dual-processor models, DigiTest reports a configuration problem if the ATTO Express PCI DC is installed. An

erroneous error occurs when it scans the ATTO Express PCI DC (SCSI HBA card), however the card passes if you continue the test. This problem does not occur when running DigiTest on the 733 MHz model.

4. On some G4 models running Mac OS 9.2, 9.2.1 or 9.2.2, graphics in the Fades window may appear in the wrong color, or the fade lines may be invisible. Clicking outside the Fade window causes the window to redraw with the correct colors.

* Additional Mac OS Notes: Mac OS 9.2 and 9.2.1 have only been tested with the Quicksilver G4 models. Earlier models that do not require OS 9.2 have not been tested for compatibility with Mac OS 9.2 or higher. In addition, you should not install OS X on the same partition or hard drive with Mac OS 9.x that you use as your startup drive for Pro Tools on pre-Quicksilver G4 models.

The following have been qualified on Apple's Latest Power Macintosh Desktop G4 733 MHz, 867 MHz, and Dual 800 MHz models:

Pro Tools Systems

- Pro Tools® | 24 MIX
- Pro Tools® | 24 MIXplus
- Pro Tools® | 24 MIX³
- Pro Tools® |24
- Digi 001™
- Digi ToolBox™ XP (Audiomedia III)

Optional PCI Cards

- MIX Farm™
- MIX I/O
- DSP Farm
- SampleCell II™ Plus (the use of multiple SampleCell II cards in 2001 G4 models requires Pro Tools 5.1.1)
- SampleCell™ TDM Module

I/O Interfaces

- 888 | 24 I/O™
- 888 I/OTM
- 882 | 20 I/O™
- 882 I/O™
- 24-bit ADAT Bridge I/O™
- 1622 I/O™

Expansion Chassis

- Pro Tools® 13-Slot Expansion Chassis
- Pro Tools® 7-Slot Expansion Chassis
- Magma 7-slot P7R-D1
- SBS 13-slot Expansion Chassis

Optional Digidesign Hardware

- AVoption | XL
- AVoption
- ProControl® with up to 5 Fader Pack™ units (5 Fader Packs require Pro Tools 5.1 or higher)
- Edit Pack™ (requires Pro Tools 5.1 or higher)
- Control | 24[™] (requires Pro Tools 5.1 or higher)
- Motor Mix (1.0.8), HUI, PC 1600
- Universal Slave Driver (USD™)
- Video Slave Driver (VSD™)
- SMPTE Slave Driver (SSD™, discontinued)

Optional Digidesign Software

- Soft SampleCell™
- Optional Digidesign® Plug-Ins
- MasterList CD™
- MachineControl[™]
- DigiTranslator™
- PostConform®
- FilmFrame™

Storage

- DigiDrive® 9|10k, 18|10k, 36|10k
- ATTO ExpressPro Tools disk utility (Note: Mac OS 9.2 requires ATTO ExpressPro-Tools v2.7 or higher, available at: http://www.attotech.com/software/)
- ATTO EPCI-DC SCSI HBA card (SCSI64 Kit)
- ATTO EPCI-UL2D SCSI HBA card for AVoptionXL video storage
- Adaptec 2906 SCSI HBA (for LE systems only)

MIDI Interfaces

- MOTU Fastlane (USB)
- MIDIport32 2x2 (USB)
- AMT8 (USB/Serial)
- Digi 001 MIDI ports (with Pro Tools LE only)

Additional Third-Party Hardware & Software:

- Griffin g4Port
- Stealth Port, by GeeThree (new version)
- Appian Jeronimo 2000
- Imation Superdisk
- Newer Technology uDrive
- VST USB Floppy Drive (FDUSB-M)
- Aurora Fuse (with v2.0.2 drivers)
- Keyspan USA28x®

Information on how to differentiate between G4 models can be found on Apple's website here: http://www.info.apple.com/kbnum/n58418

Full compatibility testing was performed with Pro Tools[®] 5.1.1 and higher.

Status Report —Previously Completed

Digidesign[®] currently supports the following Apple 4 PCI slot 2001 G4 Models. Full compatibility testing was performed with Pro Tools[®] 5.1 and higher.

Testing Completed With the Following Computers:

466 MHz Power Mac G4	533 MHz Power Mac G4	Dual 533 MHz Power Mac G4
667 MHz Power Mac G4	733 MHz Power Mac G4 (1st generation, with 1 MB backside level 3 cache)	

Qualification limited to the following products:

- Pro Tools® 5.1 or higher software running on Mac OS v9.1
- Pro Tools® | 24 MIX
- Pro Tools® | 24 MIXplus
- MIX Farm™
- MIX I/O
- Pro Tools® |24
- DSP Farm[™] (Merle II)
- AVoption
- AVoption | XL
- 888 | 24 I/O™
- 888 I/O™
- 882 | 20 I/O™
- 882 I/O™

- SBS 13-slot Expansion Chassis
- SBS 13-slot Expansion Chassis with AVoption
- ATTO ExpressPro Tools disk utility Note: Mac OS 9.2 requires ATTO ExpressPro-Tools v2.7 or higher, available at: http://www.attotech.com/software
- ATTO EPCI-DC SCSI HBA card (SCSI64 Kit)
- ATTO EPCI-UL2D SCSI HBA card for AVoptionXL video storage
- Adaptec 2906 SCSI HBA (for LE systems only)
- Griffin g4Port
- Stealth Port, by GeeThree (new version)
- Keyspan USA28x®
- Motor Mix (1.0.8), HUI, PC 1600

- 24-Bit ADAT Bridge I/O™
- 1622 I/O™
- ProControl®
- ProControl[®] with 5 Fader Pack[™] units (requires Pro Tools 5.1 or higher)
- Edit Pack™ (requires Pro Tools 5.1 or higher)
- Control | 24[™] (requires Pro Tools 5.1 or higher)
- Universal Slave Driver (USD™)
- SampleCell II[™] Plus (the use of multiple SampleCell II cards in 2001 G4 models requires Pro Tools 5.1.1)
- SampleCell™ TDM Module
- Soft SampleCell™
- Digi 001™
- Digi ToolBox™ XP (Audiomedia III)
- Optional Digidesign® Plug-Ins
- MasterList CD™
- DigiTranslator™
- MachineControl[™]
- PostConform[®]
- FilmFrame™
- Pro Tools® 13-Slot Expansion Chassis
- Pro Tools® 7-Slot Expansion Chassis
- DigiDrive® 9|10k, 18|10k, 36|10k

- Appian Jeronimo 2000
- Aurora Fuse (with v2.0.2 drivers)
- Imation Superdisk
- AMT8 (USB/Serial)
- Digi 001 MIDI ports (with Pro Tools LE only)

For information on the single processor 800	MHz Power Mac G	44, 933 MHz Power Mac	G4, and
Dual 1-GHz PowerPC G4 models announced	l by Apple in Januar	ry 2002, see the <mark>2001</mark>	& 2002 G4
Qualification Summary			



SYNC I/O - MIX System Requirements

Compatibility Announcement

March 21, 2002

Digidesign is happy to announce that our new SYNC I/O synchronization device is now approved to work with Pro Tools|24 MIX systems. SYNC I/O offers full integration with both Pro Tools|HD and Pro Tools|24 MIX systems, offers instant recall of all settings with Pro Tools software, features a greatly improved Word Clock for improved sound quality over the Universal Slave Driver (USD), and features processor speeds that operate at 4x the speed of the USD.

To use SYNC I/O with Pro Tools 24 MIX systems you must follow these three steps:

- 1. Pro Tools 5.1.3 software is required
- 2. When the Pro Tools application is not running, you must manually set the Word Clock out to 256x using the front panel button on the front of the SYNC I/O
- 3. You must connect the SYNC I/O's "Word Clock (1x, 256x)" out BNC connector to the Pro Tools | 24 MIX audio interfaces "Slave Clock In" BNC connector

Note: SYNC I/O's MachineControl ports are not functional when used with Pro Tools \mid 24 MIX systems.

SMPTE Slave Driver (SSD) - Mac OS Requirements

SSD Setup software 1.31 or higher is required.

Download

Note: The SSD will not interface directly with Blue & White G3s and G4s because the SSD connects to CPUs via a serial port connection which is not present on these CPUs. When SSD is connected to systems using these computers, it is only officially qualified as a source of superclock, not as a MTC source.



Third-Party MIDI Hardware

Third-Party MIDI Control Surfaces

CM Labs Motor Mix: For information about this product, visit the new Digidesign Development Partner website at www.digidevelopers.com

Mackie HUI Controller: For information about this product, visit the new Digidesign Development Partner website at www.digidevelopers.com

JL Cooper CS-10 series (MIDI model): For information about this product, visit the new Digidesign Development Partner website at www.digidevelopers.com

Peavey PC-1600

Third-Party MIDI Interfaces

Both USB and serial MIDI interfaces work effectively with Pro Tools. Digidesign recommends using a serial MIDI interface, as they offer the tightest possible MIDI timing. Serial MIDI interfaces require either a Mac serial port or a qualified modem-to-serial port adapter. Please check the **MIDI** section for your particular CPU in these compatibility documents for detailed information on qualified modem-to-serial port adapters.

Third-Party Video Capture Cards

The following third-party video capture cards have been tested for use with Pro Tools 5.1 and higher:

- Aurora Fuse Aurora Fuse drivers 2.0.2 or higher required. These drivers are available for free download from the Digidesign Support/Downloads/Utilities & Links
- Pinnacle miroMotion DC30 Plus Firmware v1.2.1 or higher required. Drivers and links to support options for this card can be found in Digidesign Support/Downloads/Utilities & Links

Note: This card has known problems with Pro Tools video playback on Macintosh G4 733 MHz, 800 MHz and 867 MHz models.



Pro Tools 5.2 for DigiStudio Requirements

Pro Tools 5.2 introduces support for Digidesign's DigiStudio, a virtual recording studio environment that allows multiple Pro Tools users to collaborate within the same session simultaneously along with other musicians and audio professionals using Pro Tools—right over the Internet. Collaborators enjoy "rich interchange" of material, sharing all elements of their sessions—from audio and MIDI tracks to plug-in settings to automation. Pro Tools 5.2 software builds on Pro Tools 5.1.1 software by adding DigiStudio Internet collaboration support.

Pro Tools 5.2 Requires:

- Power Macintosh-based Pro Tools TDM system with Pro Tools 5.1 or 5.1.1 previously installed
- Mac OS v9.0.4, 9.1, 9.2, 9.2.1, or 9.2.2
- 256 MB of total system RAM (because an open web browser is required to access DigiStudio from Pro Tools 5.2, the minimum RAM required is greater than with Pro Tools 5.1.1 alone)
- Web Browsers: Internet Explorer 5.0 for the Mac or Netscape 4.6 for the Mac. Netscape 6.0 for the Mac is not supported.
- All other requirements are the same as for Pro Tools 5.1.1. For complete requirements for your specific system, see the Pro Tools|24 MIX, MIXplus & MIX³ Mac OS or Pro Tools|24 Mac OS compatibility pages.

Though development is always continuing, Pro Tools 5.2 does not currently support the following:

- Pro Tools Windows systems
- Unity[™] MediaNet Storage Systems
- Collaboration with other audio applications within a DigiStudio online session

Pro Tools 5.2 is only available as a download from www.DigiProNet.com and requires the previous installation of Pro Tools 5.1 or 5.1.1. Pro Tools 5.2 does not add any features or functionality to Pro Tools 5.1.1 except for support for DigiStudio internet collaboration. **Pro Tools 5.1.1 users that are not planning on using DigiStudio should continue to use Pro Tools 5.1.1 rather than Pro Tools 5.2.**

Please see www.DigiProNet.com for further details and requirements for using DigiStudio on Pro Tools LE for Macintosh systems.

For Digi 001, Mbox, and ToolBox/Audiomedia III Pro Tools LE systems, please see the Pro Tools
LE 5.2.1 for DigiStudio Requirements
Digidesign Compatibility Documents Index



Get Power to burn with the latest Macs!

Go to the Apple Music & Audio website for info on upgrading your Mac audio workstation and the latest Mac audio happenings.

Pro Tools|24 Systems for Power Macintosh Requirements

Digidesign PCI Cards Supplied with System

- d24 audio card
- DSP Farm

Other Card Options

Digidesign Audio Interfaces (one required)

- 888 24 I/O
- 888 I/O
- 882 | 20 I/O
- 882 I/O
- 1622 I/O
- 24-Bit ADAT Bridge I/O
- ADAT Bridge I/O

Digidesign Software Supplied with System

• Pro Tools 5.1.3

Optional Digidesign Software

Pro Tools|24 Plug-In Finder

Optional Digidesign Hardware

- AVoption|XL
- AVoption
- ProControl
- Fader Pack (up to 5)
- Edit Pack

Supported CPU Models, Speeds & Requirements*

- Power Macintosh G4 (AGP graphics)
- Power Macintosh G4 (PCI graphics)
- Power Macintosh Blue & White G3
- Power Macintosh Beige G3
- Power Macintosh 9500 or 9600

Additional Computer Requirements

System Software: Mac OS v9.0.4, 9.1, 9.2, 9.2.1, or 9.2.2 (depending on CPU model)

Total System RAM:

- Minimum 256 MB
- Pro Tools application "Preferred" memory allocation set to 70 MB
- DAE "Preferred" memory allocation set to 60 MB
- Virtual memory is not supported
- High edit density, extensive use of plug-ins, and addition of options like MachineControl, DigiTranslator, and AVoption|XL will require additional RAM

Monitor, color required, minimum resolution of 1024×768

Opcode OMS v2.3.8 or higher (supplied)

Apple QuickTime v4.1.2 or higher (QuickTime 4.1.2 is supplied on your Pro Tools CD. QuickTime 5.0.2 is also

- Control 24
- Video Slave Driver
- Universal Slave Driver
- SMPTE Slave Driver (discontinued)
- SCSI64 Kit
- DigiDrive

Hard Drive Minimum Requirements

ATTO ExpressPro-Tools v2.3.2 or higher

Supported Optional Expansion Chassis

Third-Party MIDI Controllers & Interfaces

Third-Party Video Capture Cards

Pro Tools 5.2 for DigiStudio

Additional Requirements for Pro Tools 5.2 & DigiStudio

SCSI HBA Card Required

supported)

(supplied)

Maximum Performance Guidelines

*Note: Pro Tools | 24 systems require at least two PCI slot. Apple computers that do not contain PCI slots, such as the G4 Cube and iMac, are not supported with this system.

Digidesign Compatibility Documents Index

Digidesign 2001 Junipero Serra Blvd. Daly City, CA 94014-3886 U.S.A Tel 650.731.6300 Fax 650.731.6399 Product Information United States & Canada 1.800.333.2137 North & South America 650.731.6102 (USA) Europe (England) 44.1753.658496 Asia (Japan) 81.3.3505.7963



Pro Tools LE 5.2.1 for Macintosh Systems —DigiStudio Requirements

Pro Tools LE 5.2.1 introduces support for Digidesign's DigiStudio, a virtual recording studio environment that allows multiple Pro Tools users to collaborate within the same session simultaneously along with other musicians and audio professionals using Pro Tools – right over the Internet. Collaborators enjoy "rich interchange" of material, sharing all elements of their sessions – from audio and MIDI tracks to plug-in settings to automation. Pro Tools LE 5.2.1 software builds on Pro Tools LE 5.1.1 software by adding DigiStudio Internet collaboration support.

Pro Tools LE 5.2.1 Requirements

One of the following Digidesign hardware systems is **required**:

- Digi 001
- Mbox
- ToolBox/Audiomedia III

Additional Requirements:

- Power Macintosh-based Pro Tools LE system with Pro Tools LE 5.1, 5.1.1, or 5.2 (Mbox) previously installed
- Mac OS v9.0.4, 9.1, 9.2, 9.2.1, or 9.2.2
- 192 MB of total system RAM (because an open web browser is required to access DigiStudio from Pro Tools LE 5.2.1, the minimum RAM required is greater than with Pro Tools LE 5.1.1 alone)
- Web Browsers: Internet Explorer 5.0 for the Mac or Netscape 4.6 for the Mac. Netscape 6.0 for the Mac is not supported.
- All other requirements are the same as for Pro Tools LE 5.1.1 on Digi 001 or ToolBox systems, and ProTools LE 5.2 on Mbox systems. For complete requirements for your specific system, see the Digi 001, Mbox, or ToolBox/Audiomedia III compatibility pages.

Though development is always continuing, Pro Tools LE 5.2.1 does not currently support the following:

Pro Tools Windows systems

- Unity[™] MediaNet Storage Systems
- Collaboration with other audio applications within a DigiStudio online session

Pro Tools LE 5.2.1 is only available as a free download from www.DigiProNet.com and requires the previous installation of Pro Tools LE 5.1 or 5.1.1 on Digi 001 or ToolBox (Audiomedia III) systems, or 5.2 on Mbox systems. Pro Tools LE 5.2.1 does not add any features or functionality to Pro Tools LE 5.1.1 except for support for DigiStudio internet collaboration. **Pro Tools LE 5.1.1 users that are not planning on using DigiStudio should continue to use Pro Tools 5.1.1 rather than Pro Tools 5.2.1.**

Please see www.DigiProNet.com for further details and requirements for using DigiStudio on Pro Tools LE for Macintosh systems. To download 5.2.1, follow the links for DigiStudio for Getting Started and Start Now.

For TDM Systems, please see the Pro Tools 5.2 for DigiStudio Requirements

Qualified SCSI HBA Cards

For maximum track count, use of a qualified SCSI HBA (Host Bus Adapter) card is required. Optional SCSI HBA cards bundled (by Apple) with some G3 and G4 computers are not compatible due to lack of support for external drives.

Depending on your computer certain ATTO ExpressPCI and Adaptec Power Domain cards are qualified for use with Pro Tools, refer to your computer's "SCSI HBA Card" section for details at the following links:

- G4 with AGP Graphics
- G4 with PCI Graphics
- Blue & White G3
- Beige G3
- 9500/9600

SCSI HBA cards are not required for Pro Tools III Systems.

Note: Adaptec 2940UW and 3940UW cards with G4s are unsuitable for full Pro Tools performance. Due to PCI bus related issues the Adaptec 2940UW and 3940UW SCSI HBA cards are unable to provide full Pro Tools performance. Additionally, Adaptec has discontinued these cards, and as a result there will be no future engineering support from Adaptec on these cards.



Maximum Performance Guidelines for Pro Tools 24 MIX and MIXplus Systems On Mac OS

32-48 Track Performance

32-64 track performance with Pro Tools $\mid\!\!24$ MIX and MIXplus systems requires the following configuration:

Compatible SCSI HBA card

Total System RAM: minimum 256 MB

Two Pro Tools-qualified hard drives, minimum, three recommended

When using QuickTime movies with Pro Tools | 24 MIX systems, for reliable performance of 16 or more audio tracks, audio drives should be connected to a compatible SCSI HBA card, with video drives connected to the Macintosh internal (preferred) or external bus.

32-48 Track Performance

Firewire Hard Drives

The DigiDrive FireWire 80 has been qualified with Pro Tools 24 MIX systems for the following:

- Supported track count (per drive): 24 tracks per drive at 48 KHz/24-bit @ 500ms edit density
- Maximum 2 drives for a total of 48 tracks

For more information and specific requirements, see DigiDrive FireWire 80 Requirements

IDE/ATA Hard Drives

IDE/ATA drives meeting the requirements at this link are now qualified for 32 track performance with Mac TDM systems.

With 9600 and 9500 Power Macintoshes the following configurations also yield up to 32 track performance. (G3 computers do not include a Fast SCSI bus or separate internal and external SCSI busses):

- Use of a combination of Pro Tools-qualified hard drives connected to the CPU's internal and external SCSI busses. Digidesign recommends that internally mounted drives are installed according to the drive manufacturer's guidelines.
- Use of two or more Pro Tools-qualified hard drives connected to the CPU's internal Fast SCSI Bus.

Pro Tools 24 MIX Systems for Windows 2000 Requirements

Digidesign PCI Cards Supplied with System

- MIX Core
- MIX Farm (with MIXplus only)

Other Card Options

Digidesign Audio Interfaces (one required)

- 888 | 24 I/O
- 888 I/O
- 882 | 20 I/O
- 882 I/O
- 1622 I/O
- ADAT Bridge I/O

Digidesign Software Supplied with System

• Pro Tools 5.1.1 for Windows 2000

Optional Digidesign Software

Pro Tools|24 MIX Plug-In Finder

Optional Digidesign Hardware

- ProControl
- Fader Pack (up to 5)
- Edit Pack (Serial Number PT00601 or higher required)
- Control 24
- Universal Slave Driver
- Video Slave Driver
- SMPTE Slave Driver (discontinued) via a MIDI interface only
- SCSI64 Kit
- DigiDrive
- DigiDrive FireWire 80

Supported Optional Expansion Chassis

Third-Party MIDI Controllers & Interfaces

Supported CPU Speeds & Requirements

These computers are qualified to provide up to 64-track performance and full Pro Tools functionality. Other IntelliStation M Pro & E Pro models are not qualified:

IBM IntelliStation M Pro - model 6850

IBM IntelliStation M Pro - model 6889 (discontinued)

IBM IntelliStation E Pro - model 6846 (discontinued)

Minimum Computer Specification Guidelines

CPUs adhering to the Minimum Computer Specifications Guidelines may be able to provide up to 64 track performance, however they cannot be guaranteed to do so at this time.

Additional Computer Requirements

- System Software: Windows 2000 Professional with SP1 or higher
- Total System RAM: 256 MB
- Monitor, color required, minimum resolution of 1024 x 768
- Hard Drive Minimum Requirements

SCSI Host Adapter

- ATTO EPCI-DC HBA with firmware v1.63, transfer rate set to 20MB/second and a PCI burst length set at 32 bytes
- Integrated Adaptec AIC-7899 (Trident II) with BIOS 3.1 (M Pro 6850)
- Integrated Adaptec AIC-78xx chip sets with BIOS 1.3x or higher (M Pro 6889)
- Adaptec 2940UW PCI card with BIOS 1.3x or higher
- Adaptec 3940UW PCI card with BIOS 1.3x or higher

Maximum Performance Guidelines

Digidesign Compatibility Documents Index

Digidesign 2001 Junipero Serra Blvd. Daly City, CA 94014-3886 U.S.A Tel 650.731.6300 Fax 650.731.6399 Product Information United States & Canada 1.800.333.2137 North & South America 650.731.6102 (USA) Europe (England) 44.1753.658496 Asia (Japan) 81.3.3505.7963



Other Digidesign PCI Card Options - Pro Tools|24 MIX for Windows 2000

MIX Farm: Maximum of 7 MIX Farm or MIX Core cards supported

DSP Farm: Serial number FG 10501 or higher required for compatibility with Pro Tools for Windows 2000. Cards that begin with serial numbers "FF" or lower cannot be upgraded. (Hardware Exchanges are available)

MIX I/O: Maximum of 2 MIX I/O cards supported (Only 1 MIX I/O card supported with MIX systems that are upgraded Pro Tools|24 systems).

d24: Configurations with d24 cards do not support the Surround Mixer. d24 card not available for separate purchase.

Optional Digidesign Software - Pro Tools | 24 & MIX Systems for Windows 2000

- Access Virus v1.1.1 Requires a Pro Tools 24 MIX or MIXplus system.
- Bruno/Reso v1.2.1
- **DINR** v3.4.1 HUM Removal TDM is not supported on Windows 2000 based Pro Tools | 24 Systems
- **DPP-1** v1.7.1
- **D-Fi** v1.5.1
- **D-fx** v1.3.1
- **D-Verb** v1.8.1
- **Focusrite d2** v1.6.1
- **Focusrite d3** v1.4.1
- MachineControl v1.0.1
- **Maxim** v1.3.1
- **MP3 Option** v1.1.1 download-only, available from the DigiStore [additional information & updates]
- **Reverb One** v1.0.1
- SoundReplacer v1.2.1

For a complete list of plug-ins from Digidesign & Digidesign Development Partners, see the Plug-In Finder in the Products section of the website.

Expanded System Requirements - Pro Tools 24 for Windows 2000

13-Slot

- SBS (Bit3) 13 Slot Expansion Chassis model DD23
- SBS (Bit3) 13 Slot Expansion Chassis model 24-700-2-2
- SBS (Bit3) 13 Slot Expansion Chassis model 240-2-2
- SBS (Bit3) 13 Slot Expansion Chassis model 240-2-201

Chassis support a total of up to 10 Digidesign cards - this may include up to 7 MIX Core/Farm cards, 2 d24 or MIX I/O cards and any number of other Digidesign cards.

For further information about these products, please contact your Digidesign dealer or local Digidesign office and ask for the Digidesign Development Partner Catalog.

Expansion Chassis Requirements

- Chassis must have 3.3 volt power supply
- Chassis PCI bridge chips must be compliant with the PCI v2.1 specification
- Requires 2 or 4 ft Expansion Chassis cable 6 ft cables not supported

For more information about expansion chassis setup and card order configurations please see the Pro Tools 5.1.1 Addendum PDF in the Technical Documents Library of the Support/Tech Support section of the website or where the Pro Tools 5.1.1 installer places it in the Release Notes & Documentation folder.

Digidesign Requirements

MIX Core-based systems only: d24-based systems not supported with expansion chassis.

CPU requirements: a SCSI boot drive and disabling of any active IDE drivers when an Expansion Chassis is used.

DSP Farm cards: must have serial number FG 10501 or higher for compatibility with Expansion Chassis.



Third-Party MIDI Hardware

Note: To ensure compatibility, check with the manufacturer of the various system devices you plan to use on Windows 2000, to ensure that you are using the latest Windows 2000 software or drivers.

Third-Party MIDI Control Surfaces

CM Labs Motor Mix

For information about this product, visit the new Digidesign Development Partner website at www.digidevelopers.com

Mackie HUI Controller: HUI firmware v1.4.5 or later required.

For information about this product, visit the new Digidesign Development Partner website at www.digidevelopers.com

JL Cooper CS-10 series (MIDI model)

For information about this product, visit the new Digidesign Development Partner website at www.digidevelopers.com

JL Cooper MCS 3000 series MCS-Panner™

For information about this product, visit the new Digidesign Development Partner website at www.digidevelopers.com

Peavey PC-1600

Third-Party MIDI Interfaces

Emagic AMT8: see additional system requirements

MOTU Fastlane USB 2x2

Roland UM4

Roland UM2

Emagic AMT8 —Additional System Requirements

- The Windows 2000 drivers for the Emagic AMT8 currently only support connection via the serial port. The AMT8 USB port is unsupported with Pro Tools for Windows 2000.
- In order to use the Matrox G450 in dual monitor mode in a configuration with the Emagic AMT8 MIDI interface, first install the "Unitor8 Driver v3.0" driver. Next replace only the "Unitor8 Control v3.0" with the older "Unitor8 Control v1.2". Contact Emagic for more information.

IBM IntelliStation M Pro 6850 —Pro Tools Requirements

IBM IntelliStation M Pro - Model 6850 (10U, 20U, or 21U recommended)

Supported Processors (uniprocessor machines only)

• Intel Pentium 4 (single processor Xeon) - 1.5, 1.7, 1.8, or 2.0 GHz

Windows 2000 Professional with Service Pack 2 required

Display Cards

• Matrox Millennium G450 with 16MB RAM and Windows 2000 driver

BIOS

• BIOS version 116 or higher required (version 116, 120, and 124 have been tested by Digidesign)

Expansion Chassis

• The M Pro 6850 supports use with compatible third party 13-slot Expansion Chassis. With a 13-slot chassis up to 7 Pro Tools |24 MIX cards and 3 Pro Tools |24 cards (= 10 Digidesign cards total) are supported.



IBM IntelliStation M Pro 6889 —Pro Tools|24 and Pro Tools|24 MIX Requirements

IBM IntelliStation M Pro - Model 6889 (81U recommended)

Note: The IBM IntelliStation M Pro - Model 6850 series is also qualified with Pro Tools |24 MIX systems. Other IntelliStation M Pro models are currently not qualified with Pro Tools |24 and Pro Tools |24 MIX systems, including the M Pro model 6868, which has been problematic.

Supported Processors (uniprocessor machines only)

- Intel Pentium III 450, 500, or 550 MHz.
- Intel Pentium II 233, 266, 300, 350, 400, or 450 MHz.

Windows 2000 Professional with Service Pack 1 or higher required

Boot Drive

• SCSI recommended for 32 tracks or higher

Display Cards

- Matrox Millennium G400 with 16 MB RAM and Windows 2000 driver
- Matrox Millennium G200 with 8 MB RAM and Windows 2000 driver

Integrated System Audio

• Integrated Crystal Audio sound driver should be removed

Expansion Chassis

• The M Pro supports use with compatible third party 13-slot Expansion Chassis. With a 13-slot chassis up to 7 Pro Tools | 24 MIX cards and 3 Pro Tools | 24 cards (= 10 Digidesign cards total) are supported.



IBM IntelliStation E Pro - Pro Tools Requirements

IBM IntelliStation E Pro - Model 6846 (31u recommended)

Note: Other IntelliStation E Pros models are currently not qualified.

Supported Processors (uniprocessor machines only)

• Intel Pentium III - 800, 866, 933, or 1000 MHz

Windows 2000 Professional with Service Pack 1 or higher required

Boot Drive

• SCSI recommended for 32 tracks or higher

Display Cards

• Matrox Millennium G450 with 16MB RAM and Windows 2000 driver

BIOS

• BIOS version 28 or higher required for proper functionality of the Ethernet port

Expansion Chassis

• The E Pro supports use with compatible third party 13-slot Expansion Chassis. With a 13-slot chassis up to 7 Pro Tools | 24 MIX cards and 3 Pro Tools | 24 cards (= 10 Digidesign cards total) are supported.

Digidesign recognizes that some customers will want to build their own computer for use with Pro Tools. To help increase the potential for success, we are providing the following known system requirements.

However customers should be very aware of the following:

Digidesign can not provide full customer support as to the potential loss of performance for such systems. If a loss in performance is encountered Digidesign will assist customers by verifying the components of the system, to look for incompatibilities. If it is determined that the problem is inherent to a system component, a substitution to a different component may be necessary. Digidesign can not guarantee that all performance issues on these computers will be solved; however incorporating components from this compatibility document can help customers avoid problems.

Systems adhering to this specification are in no way certified by Digidesign to provide full Pro Tools functionality or track performance. While they may be able operate perfectly well and provide up to 64 tracks performance, they cannot be guaranteed to do so.

It is impossible for this list to comprehensively cover all possible options. We are providing details of known requirements and known failures based on our experience to date.

Supported Processors (uniprocessor machines only)

- Intel Pentium 4 1.3 to 2.0 GHz (recommended)
- Intel Pentium III All speeds (recommended)
- Intel Pentium II All speeds
- PCI slot w/3.3 V/2 A power supply for each MIX Farm or MIX Core card. Presence of 3.3
 volt power indicated with yellow LED on MIX Core and MIX Farm cards (Pro Tools | 24 MIX
 Systems only)
- ATX form factor
- 2 adjactent PCI slots (required for Pro Tools Systems utilizing 2 PCI cards)

Suggested Motherboards:

- Motherboards with the Intel 860 or Intel 850 chipset required for Pentium 4 processors
- Motherboards with the VIA Apollo Pro133 chipset for Pentium III processors recommended
- Intel SE440BX "Seattle" or Intel SE440BX-2 "Seattle 2" for Pentium II or Pentium III

processors recommended

- Dell Dimension XPS T: Dell Dimension must be configured with components listed on this Compatibility Document. Windows 2000 equipped Dimensions are available as part of the Small Business Line of Dell PCs
- BIOS: Phoenix (recommend used on Intel Motherboards) or Award. BIOS must have multiple PCI bridge chip support enabled and PCI parity disabled

System RAM: 256 MB

Boot Drive: SCSI drive recommend for 32 tracks or higher performance

System Software: Windows 2000 Professional with Service Pack 1 or higher. Double-byte character versions of Windows 2000 are not supported i.e. Japanese, Chinese, Arabic, etc.

Display card:

- Matrox G450 (dual ports supported) or G400 with Windows 2000 drivers recommended
- Minimum: AGP card by ATI, Matrox, STB, nVidea, or Diamond

System Audio: Multimedia Sound Cards must be deactivated

Storage:

- IDE/ATA, Firewire, or SCSI disk drive or drives as qualified in the Pro Tools TDM Hard Drive Minimum Requirements, with FAT32, FAT16 or NTFS file systems.
- HFS or HFS+ supported when used with MacOpener v5.0

Monitor: Color required; 14" minimum; 17" or larger recommended at 800 x 600 (minimum) or 1024x768 (recommended)

SCSI Host Adapter:

- ATTO ExpressPCI-DC (dual channel) with firmware v1.6.3
- Adaptec 2940UW PCI card with BIOS 1.3x or higher

Known Issues - Computers & Components Computers:

- Intel 840 & Intel 845 chipsets are known to cause performance & system failures with TDM systems
- AMD K6, K6-2 or K6-III, K7 processor based computers

Many computer manufactures fabricate proprietary non-ATX style motherboards that utilize daughter cards for their expansion slots, for example:

- Dell Optiplex: We have seen poor performance with Pro Tools Sessions exceeding 32 tracks
- Compaq DeskPro: Currently known to not boot properly with Digidesign cards installed

Plug-In Floppy Key "Disk Invalid" Issue:

If your motherboard includes an Integrated Technology Express floppy disk I/O controller it is incompatible with the Pace Key Disk driver that shipped with Pro Tools TDM v5.1.1 for Windows 2000. A fix for this issue is now included with the new Pace v3.0.5 System Files posted in the Support/Downloads/Utilities section: www.digidesign.com/download/ptutil.html

Video card:

Currently the following cards are known to be incompatible with Digidesign cards also installed:

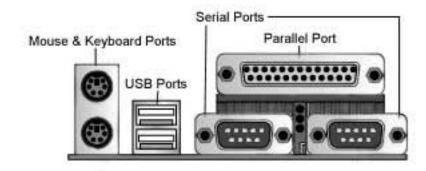
• 3DFx Voodoo Series: Voodoo Banshee, Voodoo3 Series and ATI Rage 128

Users of Phoenix BIOS may upgrade to the latest BIOS version, available form Phoenix, to resolve compatibility issues with these cards.

Motherboard Requirements

For maximum compatibility with Digidesign hardware your computer's motherboard should be based on the Intel chipset and meet the ATX form factor specifications.

The ATX form factor is the standard in PC motherboard architecture. If you are unsure whether you have an ATX motherboard look at the back of your computer. If the ports match up with the photo below your computer most likely has an ATX motherboard.



One exception to this is with higher end workstation motherboards that include daughterboards. These are circuit board extensions off of the main motherboard that are not expansion cards. Motherboards with daughterboards do not meet the ATX specification.



Windows 2000 Professional with Service Pack 1 or Higher

To ensure correct operation read the Pro Tools Installation Guide, Version 5.1.1 for Windows 2000 for system optimization and BIOS settings. Included in written and electronic form with Pro Tools 5.1.1, or downloadable from the Technical Document Library in the Support section of the website.

Additional OS Notes:

- Windows 2000 Professional with Service Pack 2 is recommended if your work involves high track count with a lot of edit densities.
- To ensure compatibility, check with the manufacturer of the various system devices you plan to use on Windows 2000, to ensure that you are using the latest Windows 2000 software or drivers.
- Double-byte character versions of Windows 2000 are not supported ie. Japanese, Chinese, Arabic, etc.
- Windows 2000 is the only operating system that Pro Tools TDM 5.1.1 for Windows 2000 will run on. It can NOT be installed on systems running Windows XP, NT, Me, 98, 95, or 3.1. (Pro Tools version 4.2.6 thru version 5.0.1 supports Windows NT)

Maximum Performance Guidelines for Pro Tools|24 MIX Systems on Windows 2000

32-64 Track Performance

System Requirements

32-64 track performance with Pro Tools $\mid\!\!24$ MIX and MIXplus systems requires the following configuration:

- IBM IntelliStation M Pro Model 6850
- IBM IntelliStation E Pro Model 6846
- IBM IntelliStation M Pro Model 6889
- Note: Other IntelliStation E Pro and M Pro models are currently not qualified (including the M Pro model 6868, which has been problematic)
- Total System RAM: 256 MB
- Windows 2000 Professional with Service Pack 2 is recommended
- Two Pro Tools-qualified hard drives connected to a qualified Host Adapter

32-48 Track Performance

The DigiDrive FireWire 80 has been qualified with the above $Pro Tools \mid 24 MIX$ systems for the following:

- Supported track count (per drive): 24 tracks per drive at 48 KHz/24-bit @ 500ms edit density
- Maximum 2 drives for a total of 48 tracks.

For more information and specific requirements, see DigiDrive FireWire 80 Requirements

32 Track Performance

The following configurations with the IntelliStation M Pro's built in SCSI port also yield up to 32 track performance:

- Use of a combination of Pro Tools-qualified hard drives connected to the CPU's internal and external SCSI busses. Digidesign recommends that internally mounted drives are installed according to the drive manufacturer's guidelines
- Use of two or more Pro Tools-qualified hard drives connected to the CPU's internal Fast SCSI Bus

Note: G3 & G4 with d24 Cards

Some d24 cards may experience recognition problems in the 400 MHz Blue & White G3 or G4s with AGP Graphics. If so, please contact your local Digidesign office.



Other Digidesign PCI Card Options - Pro Tools|24 for the Mac OS

MIX Farm: Maximum of 7 MIX Farm or MIX Core cards supported. If you are adding one or more MIX Farm cards to a Pro Tools |24 system, refer to the Pro Tools 5.1 Expanded Systems Guide

DSP Farm*: DSP Farms with serial numbers lower than FG10501 may be used for Plug-In operation but do not support connection of an Audio Interface.

Pro Tools 24 Expansion Kit (discontinued)

SampleCell II Plus: Pro Tools 5.1.1 required for more than one SampleCell II or SampleCell II Plus card in 2001 AGP G4 models (466MHz, 533MHz, Dual 533MHz, 667MHz, and 733MHz).

SampleCell II*

SampleCell II TDM Module

*Incompatibility with older DSP Farms and SampleCell II Cards & The Blue & White G3 and G4. A rev "QC" or later of the AMCC chip is required for Blue & White G3 and G4 compatibility. This rev number appears on the AMCC chip following number "5933". Older versions can cause your computer to hang while booting or when launching Pro Tools or DigiTest. QC or higher chip is required for compatibility with the PCI 2.1 spec. Ways to identify these boards are in the grid below:

Board	S/N's Below	Manufactured Before	Board Rev Before
DSP Farm I	FF09226	7/9/97	Rev H
SampleCell II	HH02001	5/20/97	Rev D

If a customer has previously updated their board (or received a refurbished card), the serial number will remain the same, but the board rev will be updated (and the AMCC chip will have "QC" or later). Cards with the rev "Q" chip can be upgraded. Please contact Digidesign Technical Support by phone to arrange for a return authorization. Registration is required.

Note: All SampleCell II Plus cards are newer, and therefore already have the compatible chip. (The SampleCell II Plus cards are the same as the original SampleCell II PCI cards, but with the included 32 MB of RAM soldered on the card)

Maximum Performance Guidelines for Pro Tools|24 System on Mac OS

32-64 track performance with Pro Tools 24 requires the following configuration:

Compatible SCSI HBA card

- Two Pro Tools-qualified hard drives, minimum, three recommended
- More than 32 tracks requires a Pro Tools | 24 Expansion Kit (which is supported but no longer available)

—OR —

• Upgrading to a Pro Tools | 24 MIX System by adding a MIX Farm card. If adding MIX Farm card(s) to Pro Tools | 24 system, refer to the Pro Tools | 24 MIX System compatibility information.

When using QuickTime movies with Pro Tools | 24, for reliable performance of 16 or more audio tracks, audio drives should be connected to a compatible SCSI HBA card, with video drives connected to the Macintosh internal (preferred) or external bus.

With 9600 and 9500 Power Macintoshes the following configurations also yield up to 32 track performance. (G3 computers do not include a Fast SCSI bus or separate internal and external SCSI busses)

- Use of a combination of Pro Tools-qualified hard drives connected to the CPU's internal and external SCSI busses. Digidesign recommends that internally mounted drives are installed according to the drive manufacturer's guidelines.
- Use of two or more qualified hard drives connected to the CPU's internal Fast SCSI Bus.

Pro Tools|24 Systems for Windows 2000 Requirements

Digidesign PCI Cards Supplied with System

- d24 Audio card
- DSP Farm

Other Card Options

Digidesign Audio Interfaces (one required)

- 888 | 24 I/O
- 888 I/O
- 882 | 20 I/O
- 882 I/O
- 1622 I/O
- 24-Bit ADAT Bridge I/O
- ADAT Bridge I/O

Digidesign Software Supplied with System

Pro Tools 5.1.1 for Windows 2000

Optional Digidesign Software

Pro Tools|24 Plug-In Finder

Optional Digidesign Hardware

- ProControl
- Fader Pack (up to 5)
- Edit Pack (Serial Number PT00601 or higher required)
- Control 24
- Universal Slave Driver
- Video Slave Driver
- SMPTE Slave Driver (discontinued) via a MIDI interface only
- SCSI64 Kit
- DigiDrive

Expansion Chassis

 d24-based systems are not supported with expansion chassis

Supported CPU Speeds & Requirements

IBM IntelliStation M Pro - model 6889

This Computer is qualified to provide up to 32-track performance and full Pro Tools functionality. Other IntelliStation M Pros are not qualified.

Minimum Computer Specification Guidelines

CPUs adhering to the Minimum Computer Specifications Guidelines may be able to provide up to 64 track performance, however they cannot be guaranteed to do so at this time.

Additional Computer Requirements

- System Software: Windows 2000 Professional with SP1 or higher
- Total System RAM: 256 MB
- Monitor, color required, minimum resolution of 1024 x 768
- Hard Drive Minimum Requirements

SCSI Host Adapter Required

- ATTO EPCI-DC HBA with firmware v1.63, transfer rate set to 20MB/second and a PCI burst length set at 32 bytes
- Integrated Adaptec AIC-78xx chip sets with BIOS 1.3x or higher (M Pro)
- Adaptec 2940UW PCI card with BIOS 1.3x or higher
- Adaptec 3940UW PCI card with BIOS 1.3x or higher

Maximum Performance Guidelines

For 32 track performance with Pro Tools | 24 on Windows 2000, use of two or more qualified hard drives connected to a qualified Host Adapter is required.

Third-Party MIDI Controllers & Interfaces

Digidesign Compatibility Documents Index

Digidesign 2001 Junipero Serra Blvd. Daly City, CA 94014-3886 U.S.A Tel 650.731.6300 Fax 650.731.6399 Product Information United States & Canada 1.800.333.2137 North & South America 650.731.6102 (USA) Europe (England) 44.1753.658496 Asia (Japan) 81.3.3505.7963



Other Digidesign PCI Card Options - Pro Tools|24 for Windows 2000

MIX Farm: Maximum of 7 MIX Farm cards supported

DSP Farm: Serial number FG 10501 or higher required for compatibility with Pro Tools for Windows 2000. Cards that begin with serial numbers "FF" or lower cannot be upgraded. (Hardware Exchanges are available)



Pro Tools III PCI System for Power Macintosh



Compatibility information for Pro Tools TDM v5.0.1 only.

Pro Tools v5.1 & 5.1.1 do not support Pro Tools III hardware.

Digidesign PCI Cards Supplied with System

- Disk I/O PCI
- DSP Farm PCI

Other Card Options

Digidesign Audio Interfaces (one required)

- 888 | 24 I/O
- 888 I/O
- 882 | 20 I/O
- 882 I/O
- ADAT Bridge I/O (16-bit model)

Digidesign Software

• Pro Tools 5.0.1

Optional Digidesign Hardware

- ProControl
- Fader Pack (up to 3)
- Video Slave Driver
- Universal Slave Driver
- SMPTE Slave Driver (discontinued)

Supported Optional Expansion Chassis

Third-Party MIDI Controllers & Interfaces

Third-Party Video Capture Cards

- Aurora Fuse (firmware v1.8.1)
- Pinnacle miroMotion DC30
 Plus(firmware v1.2.1)

Supported CPU Models, Speeds & Requirements*

- Power Macintosh G4 (AGP Graphics)
- Power Macintosh G4 (PCI Graphics)
- Power Macintosh Blue & White G3
- Power Macintosh Beige G3
- Power Macintosh 9500 or 9600

Additional Computer Requirements

System Software: Mac OS v8.6 or v9.0

Total System RAM:

- 128 MB minimum
- Pro Tools application & DAE "Preferred" memory allocations both set to 30 MB
- Additional RAM required for simultaneous use with MIDI sequencers
- Virtual memory is not supported

Monitor, color required, minimum resolution of 1024×768

Opcode OMS v2.3.8 or higher (supplied)

Apple QuickTime v4.0 or higher (supplied)

Hard Drive Minimum Requirements

Optional Digidesign Software

*Note: Pro Tools III systems require at least two PCI slot. Apple computers that do not contain PCI slots, such as the G4 Cube and iMac, are not supported with this system.

Digidesign Compatibility Documents Index

Digidesign 2001 Junipero Serra Blvd. Daly City, CA 94014-3886 U.S.A Tel 650.731.6300 Fax 650.731.6399 Product Information United States & Canada 1.800.333.2137 North & South America 650.731.6102 (USA) Europe (England) 44.1753.658496 Asia (Japan) 81.3.3505.7963



Other Digidesign PCI Card Options - Pro Tools III

DSP Farm - **PCI***: DSP Farms with serial numbers lower than FG10501 may be used for Plug-In operation but do not support connection of an Audio Interface.

SampleCell II Plus

SampleCell II - PCI*

SampleCell II TDM Module - PCI

*Incompatibility with Disk I/O, older DSP Farms and SampleCell II Cards & The Blue & White G3 and G4:

A rev "QC" or later of the AMCC chip is required for Blue & White G3 and G4 compatibility. This rev number appears on the AMCC chip following number "5933". Older versions can cause your computer to hang while booting or when launching Pro Tools or DigiTest. QC or higher chip is required for compatibility with the PCI 2.1 spec. Ways to identify these boards are in the grid below:

Board	S/N's Below	Manufactured Before	Board Rev Before
DSP Farm I - PCI	FF09226	7/9/97	Rev H
Disk I/O - PCI	FD06201	6/11/97	Rev D
SampleCell II - PCI	HH02001	5/20/97	Rev D

If a customer has previously updated their board (or received a refurbished card), the serial number will remain the same, but the board rev will be updated (and the AMCC chip will have "QC" or later). Cards with the rev "Q" chip can be upgraded. Please contact Digidesign Technical Support to arrange for a return authorization. Registration is required.

Note: All SampleCell II Plus cards are newer, and therefore already have the compatible chip. (The SampleCell II Plus cards are the same as the original SampleCell II PCI cards, but with the included 32 MB of RAM soldered on the card)

Expansion Chassis Information - Pro Tools III

- **SBS (Bit3) 7-Slot model 2101-00-2** (must use IBM PCI 2.1 compliant Bridge chips, with host card that starts with 20-101)
- Magma 7-Slot model PXB-7-RMD

For further information about these products, please contact your Digidesign dealer or local Digidesign office and ask for the Digidesign Development Partner Catalog.

Expansion Chassis Requirements

- Requires 2 or 4 ft Expansion Chassis cable 6 ft cables not supported
- When used with G3 or G4 computers the Chassis is required to have PCI 2.1 compliant bridge chips

For more information about expansion chassis setup and card order configurations please download the **Pro Tools 5.0.1 Expanded Systems Guide** in the Technical Documents Library of the Support/Tech Support section of the website. For updated slot order information with the latest Digidesign and Magma 13-slot chassis download this PDF.

Digidesign Card Requirements:

- DSP Farm cards: must be Rev H or higher (serial number FF09226 or higher) for compatibility with Expansion Chassis.
- SampleCell II cards: must be Rev D or higher (serial number HH02001 or higher) for compatibility with Expansion Chassis.

Customers with older cards should contact their local Digidesign office.



Power Macintosh G4 (AGP Graphics) - Pro Tools III Requirements

Pro Tools v5.0.1 information only

Apple G4 (AGP Graphics) Computers Supported:

Single Processor	Dual Processor
350 MHz Power Mac G4	Dual 450 MHz Power Mac G4
400 MHz Power Mac G4	Dual 500 MHz Power Mac G4
450 MHz Power Mac G4	
500 MHz Power Mac G4	

See Apple's tech archive for more info on how to differentiate between AGP Graphics and PCI Graphics G4 models at: http://www.info.apple.com/kbnum/n58418

Power Macintosh G4 version history available at www.everymac.com

Note: The following 2001 & later G4 models are currently not supported with Pro Tools III*

466MHz PowerPC G4	800MHz PowerPC G4	Dual 533MHz PowerPC G4
533MHz PowerPC G4	867MHz PowerPC G4	Dual 800MHz PowerPC G4
667MHz PowerPC G4	933MHz PowerPC G4	Dual 1GHz PowerPC G4
733MHz PowerPC CA		

^{*}While not a supported configuration, DigiSystem™NIT 5.0.1cs8 has allowed some users to run Pro Tools III PCI hardware with 2001 G4 (4 slot) models and Pro Tools 5.0.1 software.

Additional Requirements:

Mac OS 9.0, 9.0.2 or 9.0.4 required (Mac OS 9.1 has not been tested with Pro Tools III)

Power Mac G4 ROM 1.8.1 Update required

ATTO ExpressPro-Tools v2.3.2 or higher required (supplied on Pro Tools v5.0.1 CD-ROM) **Note:** Although not tested with Pro Tools III, Mac OS 9.2 requires ATTO ExpressPro-Tools v2.7 or higher, available at: http://www.attotech.com/software/

External Floppy Diskette Drive

Although not required with Pro Tools installation, an external floppy diskette drive may be required for some Plug-Ins installations. The following external USB diskette drives are currently supported:

- Imation SuperDisk
- NewerTechnology uDrive
- SmartDisk (VST) Floppy Drive (model FDUSB-M) Note: Information on VST brand products from SmartDisk can be found at: www.smartdisk.com

Links to software and drivers are available in the Digidesign Support/Downloads/Utilities Section:

- SmartDisk (VST) Floppy Drive (model FDUSB-M)
- Imation SuperDisk
- NewerTechnology uDrive
- PACE USB Floppy Enabler

Apple's revised USB support allows for booting from a USB drive, therefore you should not boot up your system with an authorization disk inserted in the USB Drive.

MIDI:

Both USB and serial MIDI interfaces work effectively with Pro Tools. Digidesign recommends using a serial MIDI interface, as they offer the tightest possible MIDI timing. Serial MIDI interfaces require either a Mac serial port or a qualified modem-to-serial port adapter. Digidesign currently supports the GeeThree Stealth Port for G4 - AGP Video (Sawtooth), Stealth Port for Dual Processor G4s or Griffin g4Port installed in the modem port (thereby not using a PCI slot).

When using the GeeThree products with OS 9.0.4, version 1.0.3 or higher of the Stealth Port extension is required, available here: http://www.geethree.com/download.html

Dual Monitor Display Card:

Digidesign has found only one configuration and card that appears to reliably achieve full Pro Tools performance when two monitors are desired. The card is called the Jeronimo 2000 by Appian. For information on installation, which must be followed very closely, and to download the required Mac driver for this card click here: http://www.digidesign.com/download/appian.html

PCI Disk I/O, DSP Farm and SampleCell II Compatibility:

The PCI Matchmaker chip on a Disk I/O or DSP Farm must be rev QC or QE (check the end of the line directly below "PCI Matchmaker" on the chip) to be compatible. Cards with rev Q chips

can be upgraded.

Note: Compatibility with video capture cards in this configuration is currently not supported by Digidesign.



Power Macintosh G4 (PCI Graphics) - Pro Tools III Requirements

Pro Tools v5.0.1 information only

G4 (PCI Graphics) Processors of all speeds supported.

See Apple's tech archive for more info on how to differentiate between AGP Graphics and PCI Graphics G4 models at: http://www.info.apple.com/kbnum/n58418

Power Macintosh G4 version history available at www.everymac.com

Mac OS 8.6, 9.0, 9.0.2, or 9.0.4 required (Mac OS 9.1 has not been tested with Pro Tools III)

Power Mac G4 ROM 1.8.1 Update required

Available from Apple at: http://asu.info.apple.com/swupdates.nsf/artnum/n11533

ATTO ExpressPro-Tools v2.3.2 required (supplied on Pro Tools v5.0.1 CD-ROM)

External Floppy Diskette Drive

Although not required with Pro Tools installation, an external floppy diskette drive may be required for some Plug-Ins installations. The following external USB diskette drives are currently supported:

- Imation SuperDisk
- NewerTechnology uDrive
- SmartDisk (VST) Floppy Drive (model FDUSB-M) Note: Information on VST brand products from SmartDisk can be found at: www.smartdisk.com

Links to software and drivers are available in the Digidesign Support/Downloads/Utilities Section:

- SmartDisk (VST) Floppy Drive (model FDUSB-M)
- Imation SuperDisk
- NewerTechnology uDrive
- PACE USB Floppy Enabler

Apple's revised USB support allows for booting from a USB drive, therefore you should not boot up your system with an authorization disk inserted in the USB Drive.

MIDI: Both USB and serial MIDI interfaces work effectively with Pro Tools. Digidesign recommends using a serial MIDI interface, as they offer the tightest possible MIDI timing. Serial MIDI interfaces require either a Mac serial port or a qualified modem-to-serial port adapter. Digidesign currently supports the GeeThree Stealth Port or Griffin gPort installed in the modem port (thereby not using a PCI slot).

When using the GeeThree products with OS 9.0.4, version 1.0.3 or higher of the Stealth Port extension is required, available here: http://www.geethree.com/download.html

PCI Disk I/O, DSP Farm and SampleCell II Compatibility: The PCI Matchmaker chip on a Disk I/O or DSP Farm must be rev QC or QE (check the end of the line directly below "PCI Matchmaker" on the chip) to be compatible. Cards with rev Q chips can be upgraded.

Note: Compatibility with video capture cards in this configuration is currently not supported by Digidesign.

Power Macintosh Blue & White G3 - Pro Tools III Requirements

Pro Tools v5.0.1 information only

Blue & White G3 Processors of all speeds supported

Mac OS 8.6, 9.0, 9.0.2, or 9.0.4 required (Mac OS 9.1 has not been tested with Pro Tools III)

G3 Firmware Update 1.1 required

Available from Apple at: http://asu.info.apple.com/swupdates.nsf/artnum/n11361

External Floppy Diskette Drive

Although not required with Pro Tools installation, an external floppy diskette drive may be required for some Plug-Ins installations. The following external USB diskette drives are currently supported:

- Imation SuperDisk
- NewerTechnology uDrive
- SmartDisk (VST) Floppy Drive (model FDUSB-M) Note: Information on VST brand products from SmartDisk can be found at: www.smartdisk.com

Links to software and drivers are available in the Digidesign Support/Downloads/Utilities Section:

- SmartDisk (VST) Floppy Drive (model FDUSB-M)
- Imation SuperDisk
- NewerTechnology uDrive
- PACE USB Floppy Enabler

Apple's revised USB support allows for booting from a USB drive, therefore you should not boot up your system with an authorization disk inserted in the USB Drive.

MIDI: Both USB and serial MIDI interfaces work effectively with Pro Tools. Digidesign recommends using a serial MIDI interface, as they offer the tightest possible MIDI timing. Serial MIDI interfaces require either a Mac serial port or a qualified modem-to-serial port adapter. Digidesign currently supports the **GeeThree Stealth Port** or **Griffin gPort** installed in the modem port (thereby not using a PCI slot).

When using the GeeThree products with OS 9.0.4, version 1.0.3 or higher of the Stealth Port extension is required, available here: http://www.geethree.com/download.html

PCI Disk I/O, DSP Farm and SampleCell II Compatibility: The PCI Matchmaker chip on a Disk I/O or DSP Farm must be rev QC or QE (check the end of the line directly below "PCI Matchmaker" on the chip) to be compatible. Cards with rev Q chips can be upgraded.



Power Macintosh Beige G3 - Pro Tools III Requirements

Pro Tools v5.0.1 information only

Beige G3 Processors of all speeds supported

Mac OS 8.6, 9.0, 9.0.2, or 9.0.4 required (Mac OS 9.1 has not been tested with Pro Tools III)

Power Macintosh 9500 & 9600 - Pro Tools III Requirements

Pro Tools v5.0.1 information only

Power Macintosh 9600 Processors of all speeds supported, excluding Multiprocessor (MP) version

Power Macintosh 9500 Processors of all speeds supported, excluding Multiprocessor (MP) version

Mac OS 8.6, 9.0, 9.0.2, or 9.0.4 required (Mac OS 9.1 has not been tested with Pro Tools III)

Expansion Chassis: The Power Macintosh 9500 & 9600 both support the use of compatible third party 7-slot Expansion Chassis. SBS (Bit3) 7-Slot Expansion Chassis must use IBM PCI 2.1 compliant Bridge chips, with host card that starts with 20-101.



Mac OS Requirements —Pro Tools v5.0.1

The required Macintosh Operating System depends on which Power Macintosh you use with Pro Tools, as follows:

Power Macintosh	Mac OS 9.0.x	Mac OS 8.6
G4 (AGP graphics)	YES	NO
G4 (PCI graphics)	YES	YES
Blue & White G3	YES	YES
Beige G3	YES	YES
9600	YES	YES
9500	YES	YES

Mac OS v9.0, v9.0.2, v9.0.4 & v8.6 Settings & Requirements

- Mac OS Base Extension set and Digi System extensions (See Pro Tools Mac FAQ #1 for more information)
- Set default cache (in the Memory Control Panel) to "Custom, 512k"
- Set Energy Saver Control Panel to "Never"
- In the Appearance Control Panel, disable "Smooth All Fonts On Screen" and change system font to other than "Charcoal"
- Firmware v1.1 required for Blue & White G3 computers running OS 8.6. Available from Apple at: http://www.info.apple.com/kbnum/n58374
- If Norton Utilities is used it must be Norton Utilities v4.0 or higher to ensure compatibility with HFS+

Special Notes for OS 9.0 users:

- Pro Tools 5.0 or higher and DAE/DSI 5.0 or higher is required with Mac OS 9.0 or higher.
- The Digidesign Control Panel requires OS 9.0 or higher When using Digidesign Control Panel, turn off Platinum Sounds in the Appearance Control Panel

Special Notes for OS 8.6 users:

• When using Digidesign Output Drivers, turn off Platinum Sounds in the Appearance Control Panel

Pro Tools 5.0.1 and OS 9.1:

•	Mac OS 9.1 will only be tested with Pro Tools 5.1 or higher. While Pro Tools 5.0.1 may
	work with OS 9.1, this configuration is untested and therefore not supported.

Pro Tools III —Optional Digidesign Software

Note: A qualified external diskette drive is required for most software installations when used with Macintosh Blue & White G3 or G4 models. Exceptions are pointed out below.

- Bruno/Reso v1.1.1
- DINR v3.3.1
- **DigiTranslator** v2.0 DigiTranslator 2.0 requires a Pro Tools |24 or MIX TDM Mac system with Pro Tools 5.1.3. DigiTranslator 1.0 (included with DigiTranslator 2.0) requires no hardware. DigiTranslator 1.0 supports Pro Tools 5.0.1 session files only. [additional information]
- **DPP-1** v1.6.1
- **D-Fi** v1.4.1
- **D-fx** v1.2.1
- **D-Verb** v1.7.1
- Focusrite d2 v1.5.1
- Focusrite d3 v1.3.1
- **MachineControl** v1.0.1: Use of MachineControl with Blue & White G3 or G4 requires a GeeThree Stealth Port Modem-to-Serial port converter with driver v1.0.3 or higher OR the Keyspan USB-to-Serial Adapter USA-28x with driver v1.6 or higher. When using the USA-28x the "Printer Port Emulation" option in the Keyspan control panel must be disabled. Keyspan firmware updates are available at: http://www.keyspan.com/downloads/
- MasterList CD v2.4 [additional information]
- Maxim v1.2.1
- MP3 Export v1.0 does not require a floppy drive, download-only, available from the DigiStore
- **PostConform** v2.0 [additional information]
- SampleCell Editor v3.1 (w/ SampleCell II Plus)
- SampleCell-TDM v1.1.1 (w/ TDM Module), does not require a floppy drive
- Soft SampleCell v3.0 [additional information]

•	Sound Designer	II	v2.8.3 -	- PCI	systems	do	not	support	the	use	of	Sound	Design	ner	II
	Plug-Ins.														

• SoundReplacer v1.1.1



Pro Tools Unity Client Configuration

Slot Order

This configuration diagram assumes a qualified AGP graphics G4 and $Digi\ 13$ -slot expansion chassis (Magma 13-slot with the 68-pin connector, rev. D or greater).

CPU

Slot	Card	
AGP	Graphics	
PCI 1	Chassis HBA	
PCI 2	Empty	
PCI 3	Optional SCSI HBA (3 slot Mac) or Empty	
PCI 4	Optional SCSI HBA (4 slot Mac) or Empty	

Chassis

Bridge	Slot	Card
1	Chassis interface	Chassis Interface Card
1	1 (4)	Core card
1	2 (5)	Optional Farm/Process card
1	3 (6)	Optional Farm/Process card
1	4 (7)	Optional Farm/Process card
1	5 (8)	Optional Farm/Process card
1	6 (9)	Optional Farm/Process card
2	7 (4)	Optional Farm/Process card
2	8 (5)	Optional Farm card
2	9 (6)	Optional Farm card
2	10 (7)	Optional Farm card
2	11 (8)	Optional Farm/SCSI card
2	12 (9)	Meridien card
2	13 (10)	FibreChannel card

Notes:

• The numbers in parentheses represent the silk-screened numbers on the chassis motherboard.



Pro Tools® 5.1.3 for Macintosh TDM Systems

Pro Tools 5.1.3 is not a general upgrade, but rather is a version with enhanced features for specific users. The new features are powerful, but Pro Tools 5.1.3 is only useful if you exchange files with Avid workstations and use DigiTranslator, AVoption, AVoption|XL, or Avid Unity MediaNet shared storage systems. There are no audio enhancements from previous versions. If you are not one of these users, there is no reason to upgrade to Pro Tools 5.1.3 from either 5.1.1 or 5.2.

For more information on "What's New in Pro Tools 5.1.3", see the Pro Tools 5.1.3 Addendum in the Technical Documents Library section of Support/Technical Support on the website, and the Pro Tools 5.1.3 announcement in the News section.

DigiTranslator 2.0 functionality in Pro Tools 5.1.3 requires the separate purchase of DigiTranslator, or an upgrade from DigiTranslator version 1.0. Please Contact Digidesign Customer Service for upgrade information.

See also: DigiTranslator Compatibility Information

Interaction and Differences between Pro Tools 5.2 and 5.1.3

Pro Tools 5.2 and 5.1.3 each contain exclusive features not available in any other version of Pro Tools software. Pro Tools 5.2 gives users DigiStudio online collaboration capabilities. Pro Tools 5.1.3's unique features include enhancements for AV and Unity users. For this reason, if you require all of the above functionality, you'll need to install both versions of Pro Tools software. Both versions of the applications can reside on the same hard drive, and either 5.2 or 5.1.3 can be launched in order to provide the features unique to that version.

If you are a user of either Pro Tools 5.2 or 5.1.3 and decide to add the other version, that new version will be installed in the Pro Tools application folder within the Digidesign folder. Both Pro Tools 5.2 and 5.1.3 will have the version number included in the application title so you can easily identify and open the appropriate version for your session. To avoid losing important information, you must keep in mind a couple of simple procedures for alternating between versions of the Pro Tools application.

For more details on using both of these versions of Pro Tools, please see below.

Running Pro Tools 5.1.3 and Pro Tools 5.2 on the Same System

Pro Tools 5.1.3 and 5.2 each contain unique features. Pro Tools 5.2 provides DigiStudio online collaboration capabilities, while Pro Tools 5.1.3 has enhancements for AVoption|XL, Media-Manager, DigiTranslator, and Avid Unity(tm) MediaNet users. Both Pro Tools 5.1.3 and 5.2 can reside on the same hard drive, but cannot be launched at the same time.

To install 5.1.3 and 5.2 on the same hard drive:

• Run the installation disk on a machine currently installed with the other version. In this case, running the installation disk will not disrupt the previously installed version. Both versions will be added to the Pro Tools application folder (with version numbers clearly stated) within the Digidesign folder.

• If both versions of Pro Tools are installed on your hard drive, you should not open a session by double-clicking on it (you will not be able to choose which version of Pro Tools you want to work with).

To open a session when both versions (5.1.3 and 5.2) are present:

- Launch the Pro Tools version that contains the features you intend to use, then open the session through the file menu.
- Or just drag and drop your session onto the icon of the desired version.

If you open and save a Pro Tools 5.2 session in Pro Tools 5.1.3:

• You will lose the Local > Online track associations.

If you open a Pro Tools 5.1.3 session in Pro Tools 5.2:

- You will loose the ability to work with the DigiTranslator option, MediaNet storage and 24P video clips.
- You will be unable to play audio imbedded in an OMFI sequence file.
- Pull-downs will only be allowed at the standard frame rates.

Pro Tools AVoption and AVoption XL users:

• You will have the full capabilities of your video system while using Pro Tools 5.2 online with DigiStudio, with the exception of 24P support.



Known Incompatibilities With Older Digidesign PCI Card

Incompatibility with Disk I/O, older DSP Farms and SampleCell II Cards & The Blue & White ${\tt G3}$ and ${\tt G4}$

A rev "QC" or later of the AMCC chip is required for Blue & White G3 and G4 compatibility. This rev number appears on the AMCC chip following number "5933". Older versions can cause your computer to hang while booting or when launching Pro Tools or DigiTest. QC or higher chip is required for compatibility with the PCI 2.1 spec. Ways to identify these boards are in the grid below:

Board	S/N's Below	Manufactured Before	Board Rev Before
DSP Farm I - PCI	FF09226	7/9/97	Rev H
Disk I/O - PCI	FD06201	6/11/97	Rev D
SampleCell II - PCI	HH02001	5/20/97	Rev D

If a customer has previously updated their board (or received a refurbished card), the serial number will remain the same, but the board rev will be updated (and the AMCC chip will have "QC" or later). Cards with the rev "Q" chip can be upgraded. Please contact Digidesign Technical Support to arrange for a return authorization. Registration is required.

Note: All SampleCell II Plus cards are newer, and therefore already have the compatible chip. (The SampleCell II Plus cards are the same as the original SampleCell II PCI cards, but with the included 32 MB of RAM soldered on the card)

Audiomedia III Card for the Mac OS

Known Incompatibility with older Audiomedia III Cards & The Blue & White G3 and G4:

A revision "QC" or later of the AMCC chip is required for Blue & White G3 and G4 compatibility. This revision number appears on the AMCC chip following number "5933". Older versions can cause your computer to hang while booting, or when launching Pro Tools or DigiTest. This chip was revised to QC on the Audiomedia III to allow for compatibility with PCs that did not allow you to disable PCI Burst Mode (it was revied shortly thereafter to QE). Ways to identify these boards are in the grid below:

Board	S/N's Below	Manufactured Before	Board Rev Before	
Audiomedia III	BK16376	3/18/97	Rev E	

If a customer has previously updated their board (or received a refurbished card), the serial number will remain the same, but the board revision will be updated (and the AMCC chip will have "QC" or later). Cards with the revision "Q" chip can be upgraded, please contact Digidesign Tech Support directly to arrange this.





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Digi 001 With Pro Tools LE For Power Macintosh

Digidesign Hardware Supplied with System

- Digi 001 PCI Card
- Digi 001 I/O Box
- Digi 001 Cable

Digidesign Software Supplied with System

• Pro Tools 5.1.1 LE

Third-Party MIDI Controllers & Interfaces

Third-Party Video Capture Cards

Optional Digidesign Software

Digi 001 Plug-In Finder

Optional Digidesign Hardware

- SampleCell II Plus
- SCSI64 Kit
- DigiDrive
- DigiDrive FireWire 80

Supported CPU Models, Speeds & Requirements*

Highly Recommended:

- Power Macintosh G4 (AGP graphics)
- Power Macintosh G4 (PCI graphics)
- Power Macintosh Blue & White G3
- Apple Titanium PowerBook G4
 (Requires Magma 2 Slot CardBus PCI Expansion System)

Also Supported:

 Power Macintosh 9600 (200 MHz or higher)

Caution, Known Performance Issues:

Power Macintosh Beige G3

Additional Computer Requirements

System Software: Mac OS v9.0.4, 9.1, 9.2, 9.2.1, or 9.2.2 (depending on CPU model)

Total System RAM:

- 128 MB minimum, 192 MB highly recommended. More RAM increases overall system and Pro Tools performance.
- Note: Some users with newer Mac systems have been unable to

launch Pro Tools LE with the minimum 128 MB RAM. Due to the increased RAM requirements of the Mac OS and newer Apple computer models, a minimum of 192 MB of RAM may be required in these systems.

- Pro Tools LE application "Preferred" memory allocation set to 40 MB
- DAE "Preferred" memory allocation set to 30 MB
- Additional RAM required for simultaneous use with MIDI sequencers
- Virtual memory is not supported

CD-ROM drive for software installation

Monitor, color required, minimum resolution of 1024×768

Opcode OMS v2.3.8 or higher (supplied)

Apple QuickTime v4.1.2 or higher (QuickTime 4.1.2 is supplied on your Pro Tools CD. QuickTime 5.0.2 is also supported)

Storage: Hard Drive Minimum Requirements

*Note: Digi 001 systems require at least one PCI slot. Apple computers that do not contain PCI slots, such as the G4 Cube and iMac, are not supported with the Digi 001.

Digidesign Compatibility Documents Index

Digidesign 2001 Junipero Serra Blvd. Daly City, CA 94014-3886 U.S.A Tel 650.731.6300 Fax 650.731.6399 Product Information United States & Canada 1.800.333.2137 North & South America 650.731.6102 (USA) Europe (England) 44.1753.658496 Asia (Japan) 81.3.3505.7963

Optional Digidesign Software —Pro Tools LE Mac

Note: A Digidesign-qualified external diskette drive (USB floppy drive) is required for most software installations when used with Macintosh Blue & White G3 or G4 models. Exceptions are pointed out below.

- **DigiTranslator** v2.0 DigiTranslator 2.0 requires a TDM Mac system with Pro Tools 5.1.3. DigiTranslator 1.0 (included with DigiTranslator 2.0) requires no hardware. DigiTranslator 1.0 supports Pro Tools 5.0.1 session files only. [additional information]
- **DINR** v3.4.1: (AudioSuite)
- **D-Fi** v1.5.1 (RTAS and AudioSuite) included with the Digi 001 Factory
- **D-fx** v1.3.1 (AudioSuite)
- **D-Verb** v1.8.1 (RTAS and AudioSuite) D-Verb is included with all Digi 001 & Mbox systems
- **Focusrite d2** v1.6.1 (AudioSuite)
- **Focusrite d3** v1.4.1 (AudioSuite)
- Maxim v1.3.1 (RTAS and AudioSuite) included with the Digi 001 Factory
- MasterList CD v2.4 [additional information]
- MP3 Option v1.1 or higher does not require a floppy drive, download-only, available from the DigiStore. See the Support Downloads section for additional information & updates
- SampleCell Editor v3.1 (w/SampleCell II Plus), does not require a floppy drive
- Soft SampleCell v3.1 [additional information]
- **Sound Designer II** v2.8.3: Compatible with Audiomedia III cards only; not compatible with Digi 001. Does not support the use of Sound Designer II Plug-Ins.
- **SoundReplacer** v1.2.1 (AudioSuite)

For a complete list of plug-ins from Digidesign & Digidesign Development Partners, see the Mbox Plug-In Finder or the Digi 001 Plug-In Finder in the Products section of the website.

DigiRack Plug-Ins

The following DigiRack Plug-Ins are included with all Pro Tools LE for Mac 5.1 and higher systems:

- DirectConnect
- Dither
- Dynamics II
- EQ II
- Invert/Duplicate
- Mod Delay
- Normalize/Gain Change
- Reverse/DC Removal
- Signal Generator
- Time Comp-Exp/Pitch Shift
- Trim

Pro Tools LE systems also include the following plug-ins bundled with the purchase of a Digi 001, ToolBox, or ToolBox XP system:

- D-Verb (RTAS)
- D-Verb A/S (AudioSuite)

Digi 001, ToolBox, ToolBox XP, or Audiomedia III systems using Pro Tools LE 5.1 or higher can download backup copies of D-Verb 1.8.1

Mbox systems with Pro Tools LE 5.2 and higher include D-Verb (v5.2) and D-Verb A/S (v5.2) as DigiRack plug-ins, automatically installed with Pro Tools LE for Mbox.

SampleCell II with Digi 001

MIDI Ports and Audio I/O Cannot Be Used Simultaneously when Running SampleCell Loop Editor or Third-Party Software with Digi 001:

Digi 001's MIDI ports use DirectIO technology to allow MIDI communication to occur between software applications and Digi 001's MIDI ports. At this time, DirectIO is also used for Digi 001's sound output drivers (Digidesign Control Panel). The Digidesign Control Panel allows third-party applications (and Digidesign's SampleCell Loop Editor) to use the Digi 001 I/O box for audio monitoring purposes. With the initial release of Digi 001, both the Digi 001 MIDI ports and Digidesign Control Panel the Digi 001 sound output drivers can not use DirectIO simultaneously. This limitation is limited to third-party applications and the SampleCell Loop Editor- Pro Tools LE is unaffected by this problem.

To avoid this problem, customers wishing to use Digi 001's audio outputs with a DirectIO compatible third party application should use an external MIDI interface instead of Digi 001's MIDI in/out connection. (This has the added benefit of satisfying the need for multiple MIDI in/out ports.) In order to use analog or digital I/O of Digi 001 with a third-party application, the user must disable the MIDI ports on Digi 001.

Please note that for full compatibility with Digi 001, the third-party sequencer applications will need to be updated. We are actively working with our digital audio sequencer developer partners to complete these updates. Please contact the respective third party sequencer manufacturer for release information.

Incompatibility with older SampleCell II Cards & The Blue & White G3 and G4:

A rev "QC" or later of the AMCC chip is required for Blue & White G3 and G4 compatibility. This rev number appears on the AMCC chip following number "5933". Older versions can cause your computer to hang while booting or when launching Pro Tools or DigiTest. QC or higher chip is required for compatibility with the PCI 2.1 spec. Ways to identify these boards are in the grid below:

Board	S/N's Below	Manufactured Before	Board Rev Before
SampleCell II - PCI	HH02001	5/20/97	Rev D

If a customer has previously updated their board (or received a refurbished card), the serial number will remain the same, but the board rev will be updated (and the AMCC chip will have "QC" or later). Cards with the rev "Q" chip can be upgraded. Please contact Digidesign Technical Support to arrange for a return authorization. Registration is required.

Note: All SampleCell II Plus cards are newer, and therefore already have the compatible chip. (The SampleCell II Plus cards are the same as the original SampleCell II PCI cards, but with the included 32 MB of RAM soldered on the card)





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Power Macintosh G4 (AGP Graphics) - Digi 001 Requirements

Apple G4 (AGP Graphics) Computers Supported:

Single Processor	Dual Processor *
350 MHz Power Mac G4	Dual 450 MHz Power Mac G4
400 MHz Power Mac G4	Dual 500 MHz Power Mac G4
450 MHz Power Mac G4	Dual 533 MHz Power Mac G4
466 MHz Power Mac G4	Dual 800 MHz Power Mac G4
500 MHz Power Mac G4	Dual 1 GHz Power Mac G4
533 MHz Power Mac G4	
667 MHz Power Mac G4	
733 MHz Power Mac G4 **	
800 MHz Power Mac G4	
867 MHz Power Mac G4	
933 MHz Power Mac G4	

^{*} Pro Tools currently does not utilize the second processor in Apple Dual Processor CPUs. If problems (such as -6042 errors) occur when using Pro Tools on a Dual Processor CPU,

Digidesign recommends the following: Move the folder named "Multiprocessing" from the System Folder "Extensions" folder to the "Extensions (Disabled)" folder and restart.

**Both models: early 733 with level 3 cache and Quicksilver 733 without level 3 cache.

Additional Information

- See the Digidesign 2001 & 2002 G4 Qualification Summary for additional details on newest models.
- See Apple's tech archive on how to differentiate between AGP Graphics and PCI Graphics G4 models at: http://www.info.apple.com/kbnum/n58418
- For current Apple computer models and specifications, see www.apple.com
- For other Apple computers and specifications, see www.everymac.com and www.applespec.com

Additional Requirements

Mac OS 9.0.4 (earlyG4 models) or 9.1 (5-slot models) or 9.2.x (Quicksilver models) required

- 5-slot 466 MHz, 533 MHz, 667 MHz, and 733 MHz (733 with level 3 cache) models require Mac OS 9.1 (pre-installed)
- Quicksilver 733 MHz (without level 3 cache), 867MHz, and Dual 800 MHz models require Mac OS 9.2, 9.2.1 or 9.2.2 (pre-installed)

External Floppy Diskette Drive

Although not required with Pro Tools installation, an external floppy diskette drive may be required for some Plug-Ins installations. The following external USB diskette drives are currently supported:

- Imation SuperDisk
- NewerTechnology uDrive
- SmartDisk (VST) Floppy Drive (model FDUSB-M) Note: Information on VST brand products from SmartDisk can be found at: www.smartdisk.com

Links to software and drivers are available in the Digidesign Support/Downloads/Utilities Section:

- SmartDisk (VST) Floppy Drive (model FDUSB-M)
- Imation SuperDisk
- NewerTechnology uDrive
- PACE USB Floppy Enabler

Apple's revised USB support allows for booting from a USB drive, therefore you should not boot up your system with an authorization disk inserted in the USB Drive.

SCSI HBA Card NOT required:

Although Pro Tools LE supports a full 24 tracks of record and playback on a dedicated ATA/IDE hard drive, use of a SCSI HBA card with a SCSI drive can increase some performance aspects of

your Digi 001 system: for more information refer to the Audio Storage Requirements page. Optional SCSI HBA cards bundled (by Apple) with Power Macintosh computers are not compatible with this configuration due to the lack of NV RAM to store Pro Tools desired SCSI transfer rate.

The following SCSI HBA cards are qualified with the G4 models listed at the top of this page:

ATTO ExpressPCI SCSI HBA card EPCI-DC (ExpressPCI Dual Channel Ultra/WIDE HBA, also available in the Digidesign SCSI64 Kit) with the following requirements:

- ATTO ExpressPCI Firmware v1.4.4 f1 or higher
- Available at: http://www.digidesign.com/download/ptutil.html
- ATTO ExpressPro-Tools v2.3.2 or higher with Synch Transfer Rate set to 20 (10) and PCI Burst Rate set to 32 bytes
- ATTO ExpressPro-Tools v2.3.2 supplied on Pro Tools v5.1 or 5.1.1 installation CD-ROM
- **Note:** Mac OS 9.2 requires ATTO ExpressPro-Tools v2.7 or higher, available at: http://www.attotech.com/software/

-OR -

Adaptec Power Domain SCSI HBA 2906 with the following requirements:

- Firmware v1.1
- PowerDomain Control v5.1 with cards set to "Fast-SCSI:10" in the Control Panel
- Adaptec files are available at: http://www.adaptec.com/worldwide/support/driverindex.html

MIDI:

Both USB and serial MIDI interfaces work effectively with Pro Tools. Digidesign recommends using a serial MIDI interface, as they offer the tightest possible MIDI timing. Serial MIDI interfaces require either a Mac serial port or a qualified modem-to-serial port adapter. Digidesign currently supports the GeeThree Stealth Port for G4 - AGP Video (Sawtooth), Stealth Port for Dual Processor G4s, or Griffin g4Port installed in the modem port (thereby not using a PCI slot).

When using the GeeThree products with OS 9.0.4, version 1.0.3 or higher of the Stealth Port extension is required, available here: http://www.geethree.com/download.html

Digidesign supports the following MIDI Interfaces for use with the 2001 models of Apple's G4s and Pro Tools® 5.1 or higher:

- MOTU Fastlane (USB)
- Opcode MIDIport32 2x2 (USB)
- AMT8 (USB/Serial)
- Digi 001 MIDI ports (with Pro Tools LE only)

While full testing will not be performed with older Pro Tools versions or older CPUs, we do not anticipate problems using these MIDI Interfaces.

Dual Monitor AGP Graphics Cards

- Appian Jeronimo[™]2000 Macintosh (with version 1.4.1 drivers and the included firmware update. additional notes)
- ProMax DH-Max (disable ProMax drivers when using with Pro Tools. Both monitors set to "thousands of colors" instead of 256. Not yet qualified with 13-slot chassis)
- NVIDIA GeForce4 MX (as shipped from Apple standard on the 933 MHz & Dual 1 GHz Power Mac G4 models)
- ATI Radeon 7500 (as shipped from Apple standard on the 800 MHz Power Mac G4)

Note: As of March 2002, the upcoming NVIDIA GeForce4 Titanium built-to-order option from Apple not yet shipping or tested.

* ProMax DH-Max Notes: Occasionally when booting a system with the ProMax DH-Max dual monitor card, the top portion of the monitors are black, the apple menu bar appears in the middle of the screen, the bottom portion of the desktop is unreachable, or the desktop may be offset to one side. A reboot will usually solve this problem. Otherwise, you can open the Monitor control panel and rearrange the monitors.

SampleCell II Support:

The PCI Matchmaker chip on a SampleCell card must be rev QC or QE (check the end of the line directly below "PCI Matchmaker" on the chip) to be compatible. Cards with rev Q chips can be upgraded.

Pro Tools LE Audio File Storage Requirements for Mac OS

IDE/ATA: Full 24 track, 24 bit, 48 KHz performance from just one dedicated IDE/ATA audio drive is supported on qualified G3 and G4 Pro Tools LE systems*

SCSI: Using a dedicated SCSI drive and SCSI HBA (Host Bus Adapter) card will, in general, provide the same performance as an IDE/ATA drive, with the exception that IDE/ATA drives may take a couple seconds to start recording 24 tracks. External SCSI drives should be used if you desire portability.

Firewire Hard Drives

The DigiDrive FireWire 80 has been qualified with Pro Tools LE systems for the following:

• Supported track count: 24 tracks on one drive at 48 KHz/24-bit @ 500ms edit density

For more information and specific requirements, see DigiDrive FireWire 80 Requirements

Requirements for both IDE/ATA or SCSI drives:

- Minimum speed of 7200 RPM & average seek time of less than 10.0 ms
- For 24 tracks, drives must be dedicated for audio (internal or external)
- Boot drives may be used for audio tracks, however performance/track count may vary
- Mac OS file system: HFS or HFS+. SCSI drives should be initialized with ATTO ExpressPro-Tools v2.3.2 or higher, IDE/ATA drives should be initialized with Apple's Drive Setup.
- **Note:** Mac OS 9.2 requires ATTO ExpressPro-Tools v2.7 or higher, available from www.attotech.com/software
- ATTO ExpressPro-Tools settings: Synch Transfer Rate set to 20 (10) and PCI Burst Rate set to 32 bytes
- If using non-ATTO ExpressPro-Tools initialized drives, click here for options.

For supported SCSI HBA cards check the compatibility document of your specific computer model.

*IDE/ATA support is limited to Powermac G3 or later models, which include a built-in ATA bus. Pre-G3 models that only shipped with SCSI have not been tested with add-on ATA/IDE controller cards.



Power Macintosh G4 (PCI Graphics) - Digi 001 Requirements

G4 (PCI Graphics) Processors of all speeds supported

See Apple's tech archive for more info on how to differentiate between AGP Graphics and PCI Graphics G4 models at: http://www.info.apple.com/kbnum/n58418

Power Macintosh G4 version history available at www.everymac.com

Mac OS 9.0, 9.0.2, or 9.0.4 required

Power Mac G4 ROM 1.8.1 Update required

Available from Apple at: http://asu.info.apple.com/swupdates.nsf/artnum/n11533

MIDI: Both USB and serial MIDI interfaces work effectively with Pro Tools. Digidesign recommends using a serial MIDI interface, as they offer the tightest possible MIDI timing. Serial MIDI interfaces require either a Mac serial port or a qualified modem-to-serial port adapter. Digidesign currently supports the **GeeThree Stealth Port** or **Griffin gPort** installed in the modem port (thereby not using a PCI slot).

When using the GeeThree products with OS 9.0.4, version 1.0.3 or higher of the Stealth Port extension is required, available here: http://www.geethree.com/download.html

SampleCell II Support: The PCI Matchmaker chip on a SampleCell card must be rev QC or QE (check the end of the line directly below "PCI Matchmaker" on the chip) to be compatible. Cards with rev Q chips can be upgraded.

External Floppy Diskette Drive

Although not required with Pro Tools installation, an external floppy diskette drive may be required for some Plug-Ins installations. The following external USB diskette drives are currently supported:

- Imation SuperDisk
- NewerTechnology uDrive
- SmartDisk (VST) Floppy Drive (model FDUSB-M) Note: Information on VST brand products from SmartDisk can be found at: www.smartdisk.com

Links to software and drivers are available in the Digidesign Support/Downloads/Utilities Section:

- SmartDisk (VST) Floppy Drive (model FDUSB-M)
- Imation SuperDisk
- NewerTechnology uDrive
- PACE USB Floppy Enabler

Apple's revised USB support allows for booting from a USB drive, therefore you should not boot up your system with an authorization disk inserted in the USB Drive.

SCSI HBA Card NOT required: Although Pro Tools LE supports a full 24 tracks of record and playback on a dedicated ATA/IDE hard drive, use of a SCSI HBA card with a SCSI drive can increase some performance aspects of your Digi 001 system: for more information refer to the Audio Storage Requirements page. Optional SCSI HBA cards bundled (by Apple) with Power Macintosh computers are not compatible with this configuration due to the lack of NV RAM to store Pro Tools desired SCSI transfer rate.

The following SCSI HBA cards are qualified with the G4s listed at the top of this page:

ATTO ExpressPCI SCSI HBA card EPCI-DC (ExpressPCI Dual Channel Ultra/WIDE HBA, also available in the Digidesign SCSI64 Kit) with the following requirements:

- ATTO ExpressPCI Firmware v1.4.4 f1 or higher
- Available at: http://www.digidesign.com/download/ptutil.html
- ATTO ExpressPro-Tools v2.3.2 or higher with Synch Transfer Rate set to 20 (10) and PCI Burst Rate set to 32 bytes
- ATTO ExpressPro-Tools v2.3.2 supplied on Pro Tools v5.1 or 5.1.1 installation CD-ROM
- **Note:** Mac OS 9.2 requires ATTO ExpressPro-Tools v2.7 or higher, available at: http://www.attotech.com/software/

-OR -

Adaptec Power Domain SCSI HBA 2906 with the following requirements:

- Firmware v1.1
- PowerDomain Control v5.1 with cards set to "Fast-SCSI:10" in the Control Panel
- Current Adaptec drivers are available at: http://www.adaptec.com/worldwide/support/driverindex.html
 Previous drivers are available at: ftp.adaptec.com/mac/scsi/

Power Macintosh Blue & White G3 - Digi 001 Requirements

Blue & White G3 Processors of all speeds supported

Mac OS 9.0.4 required (OS 9.1 not tested with these models)

QuickTime 4.1.2 required with Pro Tools v5.1.1 (included with Mac OS 9.0.4, Pro Tools installation CD, or download the standalone QuickTime 4.1.2 Installer from Apple)

G3 Firmware Update 1.1 required

Available from Apple at: http://asu.info.apple.com/swupdates.nsf/artnum/n11361

MIDI: Both USB and serial MIDI interfaces work effectively with Pro Tools. Digidesign recommends using a serial MIDI interface, as they offer the tightest possible MIDI timing. Serial MIDI interfaces require either a Mac serial port or a qualified modem-to-serial port adapter. Digidesign currently supports the **GeeThree Stealth Port** or **Griffin gPort** installed in the modem port (thereby not using a PCI slot).

When using the GeeThree products with OS 9.0.4, version 1.0.3 or higher of the Stealth Port extension is required, available here: http://www.geethree.com/download.html

External Floppy Diskette Drive

Although not required with Pro Tools installation, an external floppy diskette drive may be required for some Plug-Ins installations. The following external USB diskette drives are currently supported:

- Imation SuperDisk
- NewerTechnology uDrive
- SmartDisk (VST) Floppy Drive (model FDUSB-M) Note: Information on VST brand products from SmartDisk can be found at: www.smartdisk.com

Links to software and drivers are available in the Digidesign Support/Downloads/Utilities Section:

- SmartDisk (VST) Floppy Drive (model FDUSB-M)
- Imation SuperDisk
- NewerTechnology uDrive
- PACE USB Floppy Enabler

Apple's revised USB support allows for booting from a USB drive, therefore you should not boot up your system with an authorization disk inserted in the USB Drive.

SCSI HBA card NOT required: Although Pro Tools LE supports a full 24 tracks of record and playback on a dedicated ATA/IDE hard drive, use of a SCSI HBA card with a SCSI drive can increase some performance aspects of your Digi 001 system: for more information refer to the Audio Storage Requirements page. Optional SCSI HBA cards bundled (by Apple) with Power Macintosh computers are not compatible with this configuration due to the lack NV RAM to store Pro Tools desired SCSI transfer rate.

The following SCSI HBA cards are qualified for use with Blue & White G3s

ATTO ExpressPCI SCSI HBA card EPCI-DC (ExpressPCI Dual Channel Ultra/WIDE HBA, also available in the Digidesign SCSI64 Kit) with the following requirements:

- ATTO ExpressPCI Firmware v1.4.4 f1 or higher
- Available at: http://www.digidesign.com/download/ptutil.html
- ATTO ExpressPro-Tools v2.3.2 or higher with Synch Transfer Rate set to 20 (10) and PCI Burst Rate set to 32 bytes
- ATTO ExpressPro-Tools v2.3.2 supplied on Pro Tools v5.1 or 5.1.1 installation CD-ROM
- **Note:** Mac OS 9.2 requires ATTO ExpressPro-Tools v2.7 or higher, available at: http://www.attotech.com/software/

—OR —

Adaptec Power Domain SCSI HBA cards including:

- 2906
- 2940UW
- 2940U2W
- 3940UW

with the following requirements:

- Firmware v4.1 (or v1.1 for the 2906)
- PowerDomain Control v5.1 with cards set to "Fast-SCSI:10" in the Control Panel
- Current Adaptec drivers are available at: http://www.adaptec.com/worldwide/support/driverindex.html
- Previous drivers are available at: ftp.adaptec.com/mac/scsi/





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Apple Titanium PowerBook G4 - Digi 001 Requirements

Apple Titanium PowerBook G4 Computers Supported:

400 MHz PowerBook G4

500 MHz PowerBook G4

Magma 2 Slot CardBus PCI Expansion System

The Magma 2 Slot CardBus PCI Expansion System and Apple Titanium PowerBook G4 are now Digidesign approved with the Digi 001

System Details:

- Computer: Apple Titanium PowerBook G4, 256MB RAM, OS 9.1
- Chassis: Magma 2-Slot CardBus chassis, Model CB2S with the ATTO ExpressPCI UL2S SCSI HBA
- Digidesign Hardware/Software: Digi 001 with Pro Tools LE 5.1 or higher
- Hard Drives: 1 or 2 Digidesign approved SCSI hard drives

Track Count:

- Digi 001 with Pro Tools LE 5.1 or higher Support for up to 24 tracks of playback and record
- Track count is based on tests using 2 hard drives with 24 tracks of 24-bit/48kHz audio with 300ms edits across all tracks.

IDE/ATA Hard Drives

• EIDE drives have not been qualified with this configuration.

Firewire Hard Drives

See DigiDrive FireWire 80 Requirements

Additional Requirements:

Mac OS 9.1 required

- PowerBook G4 400 MHz and 500 MHz models require Mac OS 9.1 (included with PowerBook G4)
- OS X is not supported with Pro Tools

SCSI HBA Card required for 24 track performance:

The following SCSI HBA card is qualified with the Apple Titanium PowerBook G4/Magma configuration:

ATTO ExpressPCI Single-Channel Ultra2/WIDE UL2S

- The Magma 2 Slot Expansion System is available in two models. Model #CB2S includes the ATTO ExpressPCI Single-Channel Ultra2/WIDE UL2S model Ultra2 SCSI controller with internal and external connector.
- Magma Model #CB2 has no SCSI controller and is not approved for use with the Digi 001 without the addition of the ATTO ExpressPCI Single-Channel Ultra2/WIDE UL2S.

Atto Software & Settings

- ATTO ExpressPro-Tools v2.3.2 or higher with Synch Transfer Rate set to 20 (10) and PCI Burst Rate set to 32 bytes, available at: http://www.attotech.com/software/
- Note: Mac OS 9.2 requires ATTO ExpressPro-Tools v2.7 or higher

External Floppy Diskette Drive

Although not required with Pro Tools installation, an external floppy diskette drive may be required for some Plug-Ins installations. The following external USB diskette drives are currently supported:

- Imation SuperDisk
- NewerTechnology uDrive
- SmartDisk (VST) Floppy Drive (model FDUSB-M) Note: Information on VST brand products from SmartDisk can be found at: www.smartdisk.com

Links to software and drivers are available in the Digidesign Support/Downloads/Utilities Section:

- SmartDisk (VST) Floppy Drive (model FDUSB-M)
- Imation SuperDisk
- NewerTechnology uDrive
- PACE USB Floppy Enabler

Apple's revised USB support allows for booting from a USB drive, therefore you should not boot up your system with an authorization disk inserted in the USB Drive.

MIDI:

Digidesign supports the following MIDI Interfaces for use with the Apple Titanium PowerBook G4 and Pro Tools $\ 5.1$ or higher:

- MOTU Fastlane (USB)
- MIDIport32 2x2 (USB)
- AMT8 (USB/Serial)
- Digi 001 MIDI ports (with Pro Tools LE only)



Power Macintosh Beige G3 - Digi 001 Performance Issues & Requirements

During the development of the Pro Tools LE, Digidesign tested the Apple "beige" G3 line (all speeds) with Digi 001. During testing we encountered random occurrences of a particular software error with our DAE (Digidesign Audio Engine) and the beige G3 line. The error, "DAE -6045" would pop-up inexplicably during normal operation of Pro Tools LE. While this error is non-fatal, it will stop playback or record of a Pro Tools LE system. Digidesign engineering spent weeks trying to find the cause of this error without a successful fix.

There is some good news - to continue through the error simply click OK. We suggest saving the session and rebooting the computer to completely clear the error. Although all other aspects of Digi 001 and beige G3 configuration function satisfactory, the repetitive nature of this error caused us concern here at Digidesign. This explains why Digidesign is not formally supporting beige G3 configurations with 001 (we still support beige G3's with Audiomedia III cards and TDM systems). We did not make this decision lightly due to the large installed base of beige G3 customers. However, here at Digidesign, we believe in shipping solid systems that our customers can count on.

Digi 001 Beige G3 Requirements

- Mac OS 9.0.4 required
- QuickTime 4.1.2 or higher required with Pro Tools v5.1.1 (QT v4.1.2 included with Mac OS 9.0.4, Pro Tools installation CD, or download the standalone QuickTime 4.1.2 Installer from Apple. QuickTime 5.0.2 is also qualified)

SCSI HBA Card NOT required: Although Pro Tools LE supports a full 24 tracks of record and playback on a dedicated ATA/IDE hard drive, use of a SCSI HBA card with a SCSI drive can increase some performance aspects of your Digi 001 system: for more information refer to the Audio Storage Requirements page. Optional SCSI HBA cards bundled (by Apple) with Power Macintosh computers are not compatible with this configuration due to the lack of NV RAM to store Pro Tools desired SCSI transfer rate.

The following SCSI HBA cards are qualified for use with Beige G3 models –

ATTO ExpressPCI SCSI HBA cards including:

- PSC (ExpressPCI Single Channel Ultra/WIDE HBA)
- EPCI-DC (ExpressPCI Dual Channel Ultra/WIDE HBA, also available in the Digidesign SCSI64 Kit)

With the following requirements:

- ATTO ExpressPCI Firmware v1.4.4 f1, available at: http://www.digidesign.com/download/ptutil.html
- ExpressPro-Tools v2.3.2 or higher with Synch Transfer Rate set to 20 (10) and PCI Burst Rate set to 32 bytes, available at: http://www.attotech.com/software/

Adaptec Power Domain SCSI HBA cards including:

- 2906
- 2940UW
- 2940U2W
- 3940UW

with the following requirements:

- Firmware v4.1 (or v1.1 for the 2906)
- PowerDomain Control v5.1 with cards set to "Fast-SCSI: 10" in the Control Panel
- Current Adaptec drivers are available at: http://www.adaptec.com/worldwide/support/driverindex.html
- Previous drivers are available at: ftp.adaptec.com/mac/scsi/

Digidesign Hardware Supplied with System

- Digi 001 PCI Card
- Digi 001 I/O Box
- Digi 001 Cable

Digidesign Software Supplied with System

• Pro Tools 5.1.1 LE

Third-Party MIDI Controllers & Interfaces

Optional Digidesign Software

Digi 001 Plug-In Finder

Optional Digidesign Hardware

- SampleCell II Plus
- SCSI64 Kit
- DigiDrive
- DigiDrive FireWire 80

Supported CPU Models & Speeds

Highly Recommended:

- Intel Pentium 4 Processors with 1.3 to 2.0 GHz speeds supported, Single Processor
- Intel Pentium III Processors of all speeds supported, Single Processor
- AMD Athlon Thunderbird -Processors of all speeds supported, Single Processor

Also Supported:

• Intel Pentium II - 300 MHz or faster, Single Processor

Additional Computer Requirements

Maximum Performance Guidelines

To provide full 24-track, 24-bit performance on Pro Tools LE with high edit densities and the maximum number of Plug-Ins follow these guidelines:

- Intel Pentium 4 with Intel 845, Intel 850 or Intel 860 chipset, Single Processor
- AMD Athlon Thunderbird with pure VIA KT133A chipset, Single Processor
- Intel Pentium III at 500 MHz or higher processor speed, Single Processor
- Performance and the number of Plug-Ins will vary from PC to PC; however, faster processor speeds produce better results.
- Total System RAM: 192 MB or higher
- File System (all drives): FAT32
- Also note that we have seen better performance on computers that have less components attached and non-custom versions of the BIOS or Windows 98 SE.

Known Incompatibilities

Caution - Digi 001 is NOT supported on the following systems or systems with the following components:

- Hewlett Packard Pavillion line of computers
- AMD K6, K6-2 or K6-III, K7 processor based computers
- Original Pentium processor based computers (Pentium I)
- Computers with motherboards containing mixed chipsets from AMD plus VIA combined
- "ESS Solo-1 PCI AudioDrive"
 Sound, video and game controller.
 This device can be disabled from the "Device Manager" in the "System" Control Panel.

- System Software: Windows 98
 Second Edition or Windows Me (will NOT run on Windows XP, 2000, NT, 95, or 3.1)
- Total System RAM: 128 MB minimum 192 MB recommended (additional RAM required for simultaneous use with MIDI sequencers)
- Intel chipset (with Intel Processors, use with Pentium 4 models requires Intel 845, Intel 850 or Intel 860 chipsets)
- VIA KT133A chipset (with Athlon)
- ATX motherboard
- Phoenix or Award BIOS (recommended)
- CD-ROM drive for software install
- AGP or PCI graphic card
- Monitor, color required, minimum resolution of 1024 x 768
- One available PCI Slot
- 4GB hard drive space dedicated for audio (minimum)
- For maximum performance a dedicated qualified ATA/IDE, SCSI or Firewire drive is required.
- Dedicated Audio Hard Drive Minimum Requirements

Be sure to check out the Windows User Configurations section of the Digidesign User Conference for computer recommendations from other Pro Tools LE users.

Disclaimer: Digidesign can not verify that the information in this forum will provide full functionality or performance. Please refer to these Compatibility Documents for Digidesign's official system requirements.

Optional Third-Party SCSI HBA Card

Adaptec AVA-2906

Digidesign Compatibility Documents Index

Digidesign 2001 Junipero Serra Blvd. Daly City, CA 94014-3886 U.S.A Tel 650.731.6300 Fax 650.731.6399 Product Information United States & Canada 1.800.333.2137 North & South America 650.731.6102 (USA) Europe (England) 44.1753.658496 Asia (Japan) 81.3.3505.7963

Optional Digidesign Software —Pro Tools LE for Windows 98 SE & Windows Me

- **DINR** v3.4.1: (AudioSuite)
- **D-Fi** v1.5.1 (RTAS and AudioSuite) included with the Digi 001 Factory
- **D-fx** v1.3.1 (AudioSuite)
- **D-Verb** v1.8.1 (RTAS and AudioSuite) D-Verb is included with all Digi 001 systems
- **Focusrite d2** v1.6.1 (AudioSuite)
- Focusrite d3 v1.4.1 (AudioSuite)
- Maxim v1.3.1 (RTAS and AudioSuite) included with the Digi 001 Factory
- **MP3 Option** v1.1.1 download-only, available for purchase from the DigiStore [additional information & updates]
- SampleCell Editor v2.2 (w/SampleCell II Plus)
- **SoundReplacer** v1.2.1 (AudioSuite)

For a complete list of plug-ins from Digidesign & Digidesign Development Partners, see the Digi 001 Plug-In Finder in the Products section of the website.

DigiRack Plug-Ins

The following DigiRack Plug-Ins are included with all Windows Pro Tools LE 5.1 and higher systems:

- Dither
- Dynamics II
- EQ II
- Invert/Duplicate
- Mod Delay
- Normalize/Gain Change
- Reverse/DC Removal
- Signal Generator
- Time Comp-Exp/Pitch Shift
- Trim

Pro Tools LE systems also include the following plug-ins bundled with the purchase of a Digi 001, ToolBox, or ToolBox XP system:

- D-Verb (RTAS)
- D-Verb A/S (AudioSuite)

Digi 001, ToolBox, ToolBox XP, or Audiomedia III systems using Pro Tools LE 5.1 or higher can download backup copies of D-Verb 1.8.1

Pro Tools LE Windows Millennium & 98 Second Edition Settings & Requirements

- Each IDE drive must have DMA enabled in the "System" Control Panel. This can be changed in the "Settings" of each IDE drive on the "Device Manager" tab of the "System" Control Panel. For detailed instructions click here
- Auto Insert Notification must be disabled for all CD-ROM and removable media drives (such as Zip Drives). This can be changed in the "Settings" of each of these types of drives on the "Device Manager" tab of the "System" Control Panel. For more information click here
- Although not a requirement, removing or disabling startup applications, system utilities (i.e. Norton Utilities) internal and external hardware devices (i.e. tape drives, Ethernet cards, scanners, TV tuners, non-Digidesign sound or MIDI drivers) may increase the performance of Pro Tools LE. Just keep in mind: the more you demand of Pro Tools the more Pro Tools demands of your system.

Additional Notes

- Pro Tools LE can NOT be installed on systems running Windows XP, 2000, NT, 95, or 3.1.
- While Windows 98 First Edition may run Pro Tools LE, only Millennium & 98 Second Edition have been tested by Digidesign.
- Pro Tools LE 5.1.1 is compatible with Japanese versions of Windows Me and Windows 98 SE.

 Other double bute character versions of Windows (Chinese Arabic and Korean etc.)
 - Other double-byte character versions of Windows (Chinese, Arabic, and Korean, etc.) are not supported.

Dual Boot Systems

If you have a new PC that only has Windows XP or Windows 2000 on it, you will need to also install a compatible operating system on a separate partition or hard drive in order to use Pro Tools LE for Windows 98 SE or Windows Me. These are a couple of programs that help you create a "dual boot" system, allowing you to use more than one operating system on the same computer:

- PartitionMagic®
- System Commander® 2000

DMA Mode Enabled Instructions

DMA mode must be enabled for all IDE drives in your system.

To do this in Windows 98 SE:

- 1. Select the Windows "Start" button -> "Settings" -> "Control Panel"
- 2. In the Control Panel folder double-click the "System" control panel.
- 3. Select the "Device Manager" tab 4.
- 4. Under the "Disk drives" branch, select the IDE drive(s) you are using.
- 5. Click on "Properties"
- 6. On the "Settings" Tab of the disk's properties dialog, make sure the "DMA" option is enabled.
- 7. Click "OK"
- 8. Close the "System" control panel and the Control Panel folder by clicking on the "Close" button
- 9. Windows will prompt you to restart your computer.
- 10. Repeat for all drives present in your computer

Once you have restarted follow steps 1-5 above once again to make sure "DMA" is in fact still set to enabled. If your computer is unable to keep this setting please contact your PC manufacturer.

If your computer does not have this option and you plan to setup a Digi 001 system (not audiomedia III), you should check your BIOS settings for options to enable bus masters.

Print this page or write these instructions, as you will need to restart your computer in order to access your system BIOS.

To access your computer's BIOS you must restart your computer. During the initial startup your computer will tell you which key to press in order to enter the setup program (typically DEL or F2 for Award). Press the corresponding key during startup. You should see an "Entering Setup" message. If present, make this change to your computer's BIOS:

Allow PCI Bus Masters = Enabled

In addition to checking the BIOS if dma is not available, you can also check in device manager under "Hard disk controllers" and make sure that you have the **IDE controller and NOT the ATA controller**. If you have the ATA controller you will need to Update the hard disk controller driver to the "standard dual IDE controller".

Disable "Auto Insert Notification" Instructions

With Auto Insert Notification checked "On" Windows is constantly requesting a disc-change check. Windows places Pro Tools functions on hold during this check, which can produce a numbers of errors. To stop these requests "Auto Insert Notification" must be disabled for all CD-ROM and removable media drives (such as Zip Drives). To do this:

- 1. Select the Windows "Start" button -> "Settings" -> "Control Panel"
- 2. In the Control Panel folder double-click the "System" control panel.
- 3. Select the "Device Manager" tab
- 4. Under the "CDROM" branch highlight your CD-ROM drive
- 5. Click the "Properties" button
- 6. Select the Settings Tab
- 7. Uncheck "Auto Insert Notification"
- 8. Click "OK"
- 9. Click the "Close" button to close the "System" control panel. After closing the System Control panel, Windows will prompt you to restart your computer.

This must be done with other removable media, such as Zip drives, as well. These drivers are usually listed in the "hard drives" branch on the "Device Manager" tab.

While disabling Auto Insert Notification will dramatically improve the performance of Pro Tools LE please note the following compromises to doing this:

New CD-ROMs that have been inserted will not automatically show up in the Explorer window. You will need to "refresh" (F5) the window so that the CD-ROM shows up. The "Auto Play" feature for CD-ROMs will not work. You will need to manually choose "Auto Play" from a right-click drop-down menu of the CD-ROM icon in Explorer.



BIOS Settings

Print this page or write down the instructions below, as you will need to restart your computer in order to access your system BIOS.

To access your computer's BIOS you must restart your computer. During the initial startup your computer will tell you which key to press in order to enter the setup program (typically DEL, F1 or F2 for Award BIOS). Press the corresponding key during startup. You should see an "Entering Setup" message.

Make this change to your computer's BIOS:

PCI Parity = disabled

Note: Some manufacturers make computers with custom BIOS that do not include this setting option in their BIOS.



Pro Tools LE Audio File Storage Requirements for Windows 98 SE and Me

IDE/ATA: Full 24 track, 24 bit, 48 KHz performance from just one dedicated IDE/ATA audio drive is supported.

SCSI: Using a dedicated SCSI drive and SCSI HBA (Host Bus Adapter) card will, in general, provide the same performance as an IDE/ATA drive, with the exception that IDE/ATA drives may take a couple seconds to start recording 24 tracks. External SCSI drives should be used if you desire portability.

Requirements for both IDE/ATA or SCSI drives:

- Minimum speed of 7200 RPM & average seek time of less than 10.0 ms
- FAT32 or FAT16 file system for Windows 98 SE
- HFS & HFS+ supported when using MacOpener 2000
- For 24 tracks, drives must be dedicated for audio (internal or external)
- Boot drives may be used for audio tracks, however performance/track count may vary
- Each IDE drive must have DMA enabled in the "System" Control Panel. This can be changed in the "Settings" of each IDE drive on the "Device Manager" tab of the "System" Control Panel. For detailed instructions click here.

Firewire Hard Drives

The DigiDrive FireWire 80 has been qualified with Pro Tools LE systems for the following:

• Supported track count: 24 tracks on one drive at 48 KHz/24-bit @ 500ms edit density

For more information and specific requirements, see DigiDrive FireWire 80 Requirements



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Mbox with Pro Tools LE for Macintosh —System Requirements

Mbox

Digidesign Hardware Supplied with System

- Mbox
- USB cable

Digidesign Software Supplied with System

Pro Tools LE Version 5.2 Software

DigiRack Plug-Ins:

- D-Verb
- D-Verb A/S
- DirectConnect
- Dither
- Dynamics II
- EQ II
- Invert/Duplicate
- Mod Delay
- Normalize/Gain Change
- Reverse/DC Removal
- Signal Generator
- Time Comp-Exp/Pitch Shift
- Trim

Third-Party MIDI Controllers & Interfaces

Optional Digidesign Software

Mbox Plug-In Finder

Supported CPU Models, Speeds & Requirements

Mbox is supported on all Macintosh computers that shipped with a built in USB port. USB ports on add-on PCI cards or cardbus adapters have not been tested.

Desktop

- All Power Macintosh G4 models
- Power Macintosh G4 Cube
- Power Macintosh Blue & White G3
- All iMac models

Laptop

- PowerBook G4
- PowerBook G3
- iBook

For a complete list of Apple computers that shipped with USB ports, see www.everymac.com and

www.applespec.com

The Mbox should be connected using a standard USB cable (included) directly to the computer's USB port. Connection of the Mbox to a USB hub is not supported.

Additional Computer Requirements

System Software: Mac OS v9.1, 9.2, 9.2.1, or

9.2.2

Optional Digidesign Hardware

- SampleCell II Plus PCI Card
- SCSI64 Kit
- DigiDrive
- DigiDrive FireWire 80

- 9.2.2 Recommended: Although 9.1
 has been tested and approved, if
 you experience problems with
 system performance, Digidesign
 recommends updating to OS 9.2.2,
 available from www.apple.com or by
 using the Software Update Control
 Panel
- You must boot computer in OS 9 Pro Tools will not run using OS X or Classic mode

Total System RAM:

- 128 MB minimum, 192 MB recommended. More RAM increases overall system and Pro Tools performance.
- Note: Some users with newer Mac systems have been unable to launch Pro Tools LE with the minimum 128 MB RAM. Due to the increased RAM requirements of the Mac OS and newer Apple computer models, a minimum of 192 MB of RAM may be required in these systems.
- Pro Tools LE application "Preferred" memory allocation set to 40 MB
- DAE "Preferred" memory allocation set to 30 MB
- Additional RAM required for simultaneous use with MIDI sequencers
- 192 MB RAM required for use with DigiStudio
- Virtual memory is not supported

CD-ROM drive for software installation

Opcode OMS v2.3.8 (OMS 2.3.8 installer is supplied on your Pro Tools CD)

Apple QuickTime v5.0 or higher (QuickTime 5.0.2 installer is supplied on your Pro Tools CD)

Screen Requirements

Monitor or Laptop, color required, minimum resolution of 1024 x 768 (**note:** early iBook models have a maximum screen resolution of 800 x 600)

Hard Drive Minimum Requirements

Storage: Hard Drive Minimum Requirements

 information on ATA/IDE, Firewire, and SCSI hard drives

Digidesign Compatibility Documents Index

Digidesign 2001 Junipero Serra Blvd. Daly City, CA 94014-3886 U.S.A Tel 650.731.6300 Fax 650.731.6399 Product Information United States & Canada 1.800.333.2137 North & South America 650.731.6102 (USA) Europe (England) 44.1753.658496 Asia (Japan) 81.3.3505.7963





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Power Macintosh G4 — Mbox Requirements

All G4 Models Supported

Mac OS 9.1, 9.2, 9.2.1 or 9.2.2 required (Mac OS 9.2.2 recommended)

QuickTime 5.0 or higher required with Pro Tools LE v5.2 The QuickTime 5.0.2 installer is supplied on your Pro Tools CD

MIDI:

Both USB and serial MIDI interfaces work effectively with Pro Tools. Digidesign recommends using a serial MIDI interface, as they offer the tightest possible MIDI timing. Serial MIDI interfaces require either a Mac serial port or a qualified modem-to-serial port adapter. Digidesign currently supports the GeeThree Stealth Port for G4 - AGP Video (Sawtooth), Stealth Port for Dual Processor G4s, or Griffin g4Port installed in the modem port (thereby not using a PCI slot).

When using the GeeThree products, version 1.0.3 or higher of the Stealth Port extension is required, available here: http://www.geethree.com/download.html

Digidesign supports the following MIDI Interfaces for use with the Power Macintosh G4 and Pro Tools LF. 5.2:

- MOTU Fastlane (USB)
- Opcode MIDIport32 2x2 (USB)
- AMT8 (USB/Serial)

External Floppy Diskette Drive

Although not required with Pro Tools installation, an external floppy diskette drive may be required for some Plug-Ins installations. The following external USB diskette drives are currently supported:

- Imation SuperDisk
- NewerTechnology uDrive
- SmartDisk (VST) Floppy Drive (model FDUSB-M) Note: Information on VST brand

products from SmartDisk can be found at: www.smartdisk.com

Links to software and drivers are available in the Digidesign Support/Downloads/Utilities Section:

- SmartDisk (VST) Floppy Drive (model FDUSB-M)
- Imation SuperDisk
- NewerTechnology uDrive
- PACE USB Floppy Enabler

Apple's revised USB support allows for booting from a USB drive, therefore you should not boot up your system with an authorization disk inserted in the USB Drive.

Hard Drives —Audio Storage Requirements

For information on ATA/IDE, Firewire, and SCSI Drives:

Refer to the Pro Tools LE Audio Storage Requirements page.

SCSI HBA Card NOT required:

Although Pro Tools LE supports a full 24 tracks of record and playback on a dedicated ATA/IDE or Firewire hard drive, use of a SCSI HBA card with a SCSI drive is also supported. Optional SCSI HBA cards bundled (by Apple) with Power Macintosh computers are not compatible with this configuration due to the lack of NV RAM to store Pro Tools desired SCSI transfer rate.

The following SCSI HBA cards are qualified with the G4 with Mbox & Pro Tools LE:

ATTO ExpressPCI SCSI HBA card EPCI-DC (ExpressPCI Dual Channel Ultra/WIDE HBA, also available in the Digidesign SCSI64 Kit) with the following requirements:

- ATTO ExpressPCI Firmware v1.4.4 f1, available at: http://www.digidesign.com/download/ptutil.html
- ATTO ExpressPro-Tools v2.3.2 (supplied on Pro Tools CD) or higher with Synch Transfer Rate set to 20 (10) and PCI Burst Rate set to 32 bytes
- Note: Mac OS 9.2 requires ATTO ExpressPro-Tools v2.7 or higher, available at: http://www.attotech.com/software/

-OR -

Adaptec Power Domain SCSI HBA 2906 with the following requirements:

- Firmware v1.1
- PowerDomain Control v5.1 with cards set to "Fast-SCSI:10" in the Control Panel
- Adaptec files are available at: http://www.adaptec.com/worldwide/support/driverindex.html

Known Issues

Mac OS X and "Classic" mode NOT Supported

Pro Tools (any version) will not work with OS X or in Classic mode. It is necessary that

- you boot the computer in OS 9 when installing or using Pro Tools.
- The 2001 and 2002 "Quicksilver" G4 models require OS 9.2, 9.2.1, or 9.2.2 to run Pro Tools. Users should not attempt to install OS 9.1, or run OSX, (including Classic mode), with Pro Tools on these machines.
- The Quicksilver G4 models have been tested with the Mac OS as shippped from Apple on these machines, with a dual boot system which includes both OS 9.2.x and OS X. On these dual-boot systems, it is absolutely necessary to boot from OS 9.2.x in order to run Pro Tools. Although you cannot use Pro Tools with OS X or in "Classic" mode under OS X, it is not necessary to remove OS X from these "Quicksilver" G4 computers.
- Pre-Quicksilver models did not ship with a dual-boot system of OS 9 and OS X preinstalled by Apple. If you do choose to install OS X in order to create a dual-boot
 system, you should not install OS X on the same partition or hard drive with Mac
 OS 9.x that you use as your startup drive for Pro Tools on pre-Quicksilver G4
 models.
- Whenever updating any operating system, particularly if you are updating Mac OS X for use with other applications, it is recommended that you remove any plug-in key disk authorizations and store them on the floppy disk before upating or installing the Mac OS. After updating the OS, you can then re-install the key disk authorizations after first booting in OS 9

USB Hubs

The Mbox should be connected using a standard USB cable (included) directly to the computer's built-in USB port. Connection of the Mbox to a USB hub or USB port on the computer keyboard is not supported.

Dual Processor G4 Models

Although Mbox and Pro Tools LE are supported on Dual processor G4 models, Pro Tools currently does not utilize the second processor in Apple Dual Processor CPUs. If problems (such as -6042 errors) occur when using Pro Tools on a Dual Processor CPU, Digidesign recommends the following: Move the folder named "Multiprocessing" from the System Folder "Extensions" folder to the "Extensions (Disabled)" folder and restart.

Power Macintosh G4 version history and specifications are also available at www.everymac.com and www.applespec.com

Incompatibility with older SampleCell II Cards

While SampleCell II Plus cards are compatible with Mbox, older SampleCell II PCI cards may require a chip upgrade.





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Mac OS Requirements —Pro Tools LE Version 5.2

Approved Mac Operating Systems

- Pro Tools LE v5.2 has been tested and approved on Mac OS 9.1, 9.2, 9.2.1, and 9.2.2 (see Known Issues at the bottom of this page)
- Newer 5 slot G4 models (AGP graphics slot + 4 PCI slots = 5 slots total) require Mac OS 9.2/9.2.1/9.2.2 on the 2001/2002 Quicksilver 5 slot models
- 9.2.2 Recommended: Although 9.1 has been tested and approved, if you experience problems with system performance, Digidesign recommends updating to OS 9.2.2, available from www.apple.com
- To update from OS 9 to 9.1 or 9.2.1, go to www.info.apple.com/export
- To update from OS 9.2 to 9.2.2, go to www.info.apple.com/support/downloads.html or by using the Software Update Control Panel
- You must boot computer in OS 9 Pro Tools will not run using OS X or Classic mode

Settings & Requirements

- Mac OS Base Extension set and Digi System extensions (See Pro Tools Mac FAQ #1 for more information)
- Set default cache (in the Memory Control Panel) to "Custom, 512k"
- Set Energy Saver Control Panel to "Never"
- In the Appearance Control Panel, disable "Smooth All Fonts On Screen" and change system font to other than "Charcoal"
- If Norton Utilities is used it must be Norton Utilities v4.0 or higher to ensure compatibility with HFS+

Known Issues:

- 1. The "Quicksilver" G4 models require OS 9.2, 9.2.1, or 9.2.2 to run Pro Tools. Users should not attempt to install OS 9.1, or run OSX, (including Classic mode), with Pro Tools on these machines. The Quicksilver G4 models have been tested with the Mac OS as shippped from Apple on these machines, with a dual boot system which includes both OS 9.2.x and OS X. It is absolutely necessary to boot from OS 9.2.x in order to run Pro Tools. Although you cannot use Pro Tools with OS X or in "Classic" mode under OS X, it is not necessary to remove OS X from these "Quicksilver" G4 computers
- 2. Additional Mac OS Notes: If you have a pre-2001 Apple computer that did not ship with a dual boot system with both Mac OS X and OS 9 pre-installed by Apple, it is recommended that you do not install OS X on the same partition or hard drive with Mac OS 9.x that you use as your startup drive for Pro Tools
- 3. Whenever updating any operating system, particularly if you are updating Mac OS X for use with other applications, it is recommended that you remove any plug-in key disk authorizations and store them on the floppy disk before upating or installing the Mac OS. After updating the OS, you can then re-install the key disk authorizations after first booting in OS 9
- 4. **Pro Tools currently does not utilize the second processor in dual processor Power Mac G4 models**. If problems (such as -6042 errors) occur when using Pro Tools on one of these machines, Digidesign recommends the following: Move the folder named "Multiprocessing" from the System Folder "Extensions" folder to the "Extensions (Disabled)" folder and restart

See Apple's tech archive on how to differentiate between AGP Graphics and PCI Graphics G4 models at: www.info.apple.com/kbnum/n58418

Power Macintosh version history and specifications are available at www.everymac.com and www.applespec.com



SampleCell II PCI Cards with Mbox & Audiomedia III Pro Tools LE Systems

Incompatibility with older SampleCell II Cards & The Blue & White G3 and G4:

A rev "QC" or later of the AMCC chip is required for Blue & White G3 and G4 compatibility. This rev number appears on the AMCC chip following number "5933". Older versions can cause your computer to hang while booting or when launching Pro Tools or DigiTest. QC or higher chip is required for compatibility with the PCI 2.1 spec. Ways to identify these boards are in the grid below:

Board	S/N's Below	Manufactured Before	Board Rev Before
SampleCell II - PCI	HH02001	5/20/97	Rev D

If a customer has previously updated their board (or received a refurbished card), the serial number will remain the same, but the board rev will be updated (and the AMCC chip will have "QC" or later). Cards with the rev "Q" chip can be upgraded. Please contact Digidesign Technical Suppor by phonet to arrange for a return authorization. Registration is required.

Note: All SampleCell II Plus cards are newer, and therefore already have the compatible chip. (The SampleCell II Plus cards are the same as the original SampleCell II PCI cards, but with the included 32 MB of RAM soldered on the card)

Power Macintosh Blue & White G3 — Mbox Requirements

All Blue & White G3 Models Supported

Mac OS 9.1, 9.2, 9.2.1 or 9.2.2 required (Mac OS 9.2.2 recommended)

QuickTime 5.0 or higher required with Pro Tools v5.2

The QuickTime 5.0.2 installer is supplied on your Pro Tools CD

MIDI:

Both USB and serial MIDI interfaces work effectively with Pro Tools. Digidesign recommends using a serial MIDI interface, as they offer the tightest possible MIDI timing. Serial MIDI interfaces require either a Mac serial port or a qualified modem-to-serial port adapter. Digidesign currently supports the GeeThree Stealth Port or Griffin gPort installed in the modem port (thereby not using a PCI slot).

When using the GeeThree products, version 1.0.3 or higher of the Stealth Port extension is required, available here: http://www.geethree.com/download.html

External Floppy Diskette Drive

Although not required with Pro Tools installation, an external floppy diskette drive may be required for some Plug-Ins installations. The following external USB diskette drives are currently supported:

- Imation SuperDisk
- NewerTechnology uDrive
- SmartDisk (VST) Floppy Drive (model FDUSB-M) Note: Information on VST brand products from SmartDisk can be found at: www.smartdisk.com

Links to software and drivers are available in the Digidesign Support/Downloads/Utilities Section:

- SmartDisk (VST) Floppy Drive (model FDUSB-M)
- Imation SuperDisk
- NewerTechnology uDrive
- PACE USB Floppy Enabler

Apple's revised USB support allows for booting from a USB drive, therefore you should not boot up your system with an authorization disk inserted in the USB Drive.

Hard Drives —Audio Storage Requirements

For information on ATA/IDE, Firewire, and SCSI Drives:

Refer to the Pro Tools LE Audio Storage Requirements page.

SCSI HBA Card NOT required:

Although Pro Tools LE supports a full 24 tracks of record and playback on a dedicated ATA/IDE or Firewire hard drive, use of a SCSI HBA card with a SCSI drive is also supported. Optional SCSI HBA cards bundled (by Apple) with Power Macintosh computers are not compatible with this configuration due to the lack of NV RAM to store Pro Tools desired SCSI transfer rate.

The following SCSI HBA cards are qualified with the Apple Blue & White G3 models with Mbox & Pro Tools LE:

ATTO ExpressPCI SCSI HBA card EPCI-DC (ExpressPCI Dual Channel Ultra/WIDE HBA, also available in the Digidesign SCSI64 Kit) with the following requirements:

- ATTO ExpressPCI Firmware v1.4.4 f1, available at: http://www.digidesign.com/download/ptutil.html
- ATTO ExpressPro-Tools v2.3.2 (supplied on Pro Tools CD) or higher with Synch Transfer Rate set to 20 (10) and PCI Burst Rate set to 32 bytes
- Note: Mac OS 9.2 requires ATTO ExpressPro-Tools v2.7 or higher, available at: http://www.attotech.com/software/

—OR —

Adaptec Power Domain SCSI HBA cards including:

- 2906
- 2940UW
- 3940UW
- 2940U2W

with the following requirements:

- Firmware v4.1 (or v1.1 for the 2906)
- PowerDomain Control v5.1 with cards set to "Fast-SCSI: 10" in the Control Panel
- Current Adaptec drivers are available at: http://www.adaptec.com/worldwide/support/driverindex.html
- Previous drivers are available at: ftp.adaptec.com/mac/scsi/

Known Issues

Mac OS X and "Classic" mode NOT Supported

- Pro Tools (any version) will not work with OS X or in Classic mode. It is necessary that you boot the computer in OS 9 when installing or using Pro Tools. In addition, on the Blue & White G3, if you do choose to install OS X in order to create a dual-boot system, you should not install OS X on the same partition or hard drive with Mac OS 9.x that you use as your startup drive for Pro Tools.
- Whenever updating any operating system, particularly if you are updating Mac OS X for use with other applications, it is recommended that you remove any plug-in key disk authorizations and store them on the floppy disk before upating or installing the Mac OS. After updating the OS, you can then re-install the key disk authorizations after first booting in OS 9

USB Hub:

The Mbox should be connected using a standard USB cable (included) directly to the computer's built-in USB port. Connection of the Mbox to a USB hub or USB port on the computer keyboard is not supported.

Incompatibility	with	older	SampleCell	II	Cards

While SampleCell II Plus cards are compatible with Mbox, older SampleCell II PCI cards require a chip upgrade.





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Apple iBook - Mbox Requirements

Apple iBook Computers Supported

The following dual USB port, "ice white" iBook models are supported with Mbox:

iBook Model	Processor	Display/Maximum Screen Resolution
iBook	500 MHz (G3)	12.1" (1024x768)
iBook	600 MHz (G3)	12.1" (1024x768)
iBook	600 MHz (G3)	14.1" (1024x768)
iBook	700 MHz (G3)	12.1" (1024x768)
iBook	700 MHz (G3)	14.1" (1024x768)

Older Apple iBook Computers —Not Recommended

Limited Display Capability:

Although you may be able to use the Mbox on the earlier iBook models (with built-in handle), the maximum screen resolution of 800×600 of these models will not allow the complete display of all Pro Tools functions. For example, without a screen capable of 1024×768 resolution, you will not be able to access or edit grid and nudge values in Pro Tools LE.

Limited USB Capability:

The following earlier iBook models only have one built-in USB port. The addition of any USB devices such as a MIDI interface, USB computer keyboard, or USB mouse along with the Mbox would require a powered USB hub, which is an unsupported configuration.

The following iBook models may work with Mbox, but are not recommended:

iBook Model	Processor	Display/Maximum Screen Resolution
iBook	300 MHz (G3)	12.1" (800x600)
iBook SE	366 MHz (G3)	12.1" (800x600)
iBook	366 MHz (G3)	12.1" (800x600)
iBook SE	466 MHz (G3)	12.1" (800x600)

Additional Information

- For current Apple computer models and specifications, see www.apple.com
- For Apple iBook version history and specifications, see www.everymac.com and www.applespec.com

Additional Requirements

Mac OS 9.2.2 recommended

- See Mac OS Requirements
- iBook 500 MHz and 600 MHz models require Mac OS 9.2.2 (included with iBook 500 and higher)
- OS X is not supported with Pro Tools
- Classic Mode under OS X is also not supported, you must choose Mac OS 9 as your startup system

External Floppy Diskette Drive

Although not required with Pro Tools installation, an external floppy diskette drive may be required for some Plug-Ins installations. The following external USB diskette drives are currently supported:

- Imation SuperDisk
- NewerTechnology uDrive
- SmartDisk (VST) Floppy Drive (model FDUSB-M) Note: Information on VST brand products from SmartDisk can be found at: www.smartdisk.com

Links to software and drivers are available in the Digidesign Support/Downloads/Utilities Section:

- SmartDisk (VST) Floppy Drive (model FDUSB-M)
- Imation SuperDisk
- NewerTechnology uDrive
- PACE USB Floppy Enabler

Apple's revised USB support allows for booting from a USB drive, therefore you should not boot up your system with an authorization disk inserted in the USB Drive.

MIDI:

Digidesign supports the following MIDI Interfaces for use with the Apple Titanium PowerBook G4 and Pro Tools $\ \ 5.1$ or higher:

- MOTU Fastlane (USB)
- MIDIport32 2x2 (USB)
- AMT8 (USB/Serial)
- Digi 001 MIDI ports (with Pro Tools LE only)

Hard Drives —Audio Storage Requirements

Although recording and playback of up to 24 tracks may be possible using the internal drive in the iBook, a separate dedicated audio hard drive is highly recommended for maximum performance and track count.

Firewire Hard Drives

• For best results, follow the guidelines on the DigiDrive FireWire 80 Requirements



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Digi ToolBox XP & Digi ToolBox CD With Audiomedia III Card & Pro Tools LE For Power Macintosh

Digi ToolBox XP

Digidesign Hardware Supplied with System

Audiomedia III Card

Digidesign Software Supplied with System

- Pro Tools LE 5.1.1
- D-Verb

Digi ToolBox CD Bundle

Digidesign Hardware Supplied with System

Audiomedia III Card

Digidesign Software Supplied with System

- Pro Tools LE 5.1.1
- D-Verb
- MasterList CD (Mac Only)
- Maxim
- DINR

Note: The MasterList CD, Maxim, and DINR software included with the Digi ToolBox CD bundle require a qualified external diskette drive for installation when used with a Blue & White G3 or higher, including all G4

Supported CPU Models, Speeds & Requirements*

Highly Recommended:

- Power Macintosh G4 (AGP graphics)
- Power Macintosh G4 (PCI graphics)
- Power Macintosh Blue & White G3

Also Supported:

- Power Macintosh Beige G3
- Power Macintosh 9600 (200 MHz or higher)

Additional Computer Requirements

System Software: Mac OS v9.0.4, 9.1, 9.2, 9.2.1, or 9.2.2 (depending on CPU model)

Total System RAM:

- 128 MB minimum, 192 MB recommended. More RAM increases overall system and Pro Tools performance.
- Note: Some users with newer Mac systems have been unable to launch Pro Tools LE with the minimum 128 MB RAM. Due to the increased RAM requirements of the Mac OS and newer Apple computer models, a minimum of 192 MB of RAM may be required in these systems.

models.

Third-Party MIDI Controllers & Interfaces

Third-Party Video Capture Cards

Optional Digidesign Software

Pro Tools LE Plug-In Finder

Optional Digidesign Hardware

- SampleCell II Plus
- SCSI64 Kit
- DigiDrive
- DigiDrive FireWire 80

Non-ToolBox Audiomedia III card owners:

Owners of Audiomedia III cards that do not own Pro Tools software can purchase the upgrade to Pro Tools LE for ToolBox systems from the DigiStore or your local Digidesign Office

- Pro Tools LE application "Preferred" memory allocation set to 40 MB
- DAE "Preferred" memory allocation set to 30 MB
- Additional RAM required for simultaneous use with MIDI sequencers
- Virtual memory is not supported

CD-ROM drive for software install

Monitor, color required, minimum resolution of 1024×768

Opcode OMS v2.3.8 or higher (supplied)

Apple QuickTime v4.1.2 or higher (QuickTime 4.1.2 is supplied on your Pro Tools CD. QuickTime 5.0.2 is also supported)

Storage: Hard Drive Minimum Requirements

*Note: Digi ToolBox XP, Digi ToolBox CD, and Audiomedia III based systems require at least one PCI slot. Apple computers that do not contain PCI slots, such as the G4 Cube and iMac models, are not supported with this system.

Digidesign Compatibility Documents Index

Digidesign 2001 Junipero Serra Blvd. Daly City, CA 94014-3886 U.S.A Tel 650.731.6300 Fax 650.731.6399 Product Information United States & Canada 1.800.333.2137 North & South America 650.731.6102 (USA) Europe (England) 44.1753.658496 Asia (Japan) 81.3.3505.7963





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Power Macintosh G4 (AGP Graphics) - Digi ToolBox XP Requirements

Apple G4 (AGP Graphics) Computers Supported:

Single Processor	Dual Processor *
350 MHz Power Mac G4	Dual 450 MHz Power Mac G4
400 MHz Power Mac G4	Dual 500 MHz Power Mac G4
450 MHz Power Mac G4	Dual 533 MHz Power Mac G4
466 MHz Power Mac G4	Dual 800 MHz Power Mac G4
500 MHz Power Mac G4	
533 MHz Power Mac G4	
667 MHz Power Mac G4	
733 MHz Power Mac G4 **	
867 MHz Power Mac G4	

^{*} Pro Tools currently does not utilize the second processor in Apple Dual Processor CPUs. If problems (such as -6042 errors) occur when using Pro Tools on a Dual Processor CPU, Digidesign recommends the following: Move the folder named "Multiprocessing" from the System Folder "Extensions" folder to the "Extensions (Disabled)" folder and restart.

^{**}Both models: early 733 with level 3 cache and Quicksilver 733 without level 3 cache.

See the 2001 G4 Qualification page for more details.

See Apple's tech archive on how to differentiate between AGP Graphics and PCI Graphics G4 models at: http://www.info.apple.com/kbnum/n58418

Power Macintosh G4 version history available at www.everymac.com and www.applespec.com

Additional Requirements:

Mac OS 9.0.4 (earlyG4 models) or 9.1 (5-slot models) or 9.2.x (Quicksilver models) required

- 5-slot 466 MHz, 533 MHz, 667 MHz, and 733 MHz (733 with level 3 cache) models require Mac OS 9.1 (pre-installed)
- Quicksilver 733 MHz (without level 3 cache), 867MHz, and Dual 800 MHz models require Mac OS 9.2, 9.2.1, or 9.2.2 (pre-installed)

External Floppy Diskette Drive

Although not required with Pro Tools installation, an external floppy diskette drive may be required for some Plug-Ins installations. The following external USB diskette drives are currently supported:

- Imation SuperDisk
- NewerTechnology uDrive
- SmartDisk (VST) Floppy Drive (model FDUSB-M) Note: Information on VST brand products from SmartDisk can be found at: www.smartdisk.com

Links to software and drivers are available in the Digidesign Support/Downloads/Utilities Section:

- SmartDisk (VST) Floppy Drive (model FDUSB-M)
- Imation SuperDisk
- NewerTechnology uDrive
- PACE USB Floppy Enabler

Apple's revised USB support allows for booting from a USB drive, therefore you should not boot up your system with an authorization disk inserted in the USB Drive.

SCSI HBA Card NOT required:

Although Pro Tools LE supports a full 24 tracks of record and playback on a dedicated ATA/IDE hard drive, use of a SCSI HBA card with a SCSI drive can increase some performance aspects of your Digi 001 system: for more information refer to the Audio Storage Requirements page. Optional SCSI HBA cards bundled (by Apple) with Power Macintosh computers are not compatible with this configuration due to the lack of NV RAM to store Pro Tools desired SCSI transfer rate.

The following SCSI HBA cards are qualified with the G4 models listed at the top of this page:

ATTO ExpressPCI SCSI HBA card EPCI-DC (ExpressPCI Dual Channel Ultra/WIDE HBA, also available in the Digidesign SCSI64 Kit) with the following requirements:

- ATTO ExpressPCI Firmware v1.4.4 f1, available at: http://www.digidesign.com/download/ptutil.html
- ATTO ExpressPro-Tools v2.3.2 or higher with Synch Transfer Rate set to 20 (10) and PCI Burst Rate set to 32 bytes, available at: http://www.attotech.com/software/
- Note: Mac OS 9.2 requires ATTO ExpressPro-Tools v2.7 or higher, available at: http://www.attotech.com/software/

-OR -

Adaptec Power Domain SCSI HBA 2906 with the following requirements:

- Firmware v1.1
- PowerDomain Control v5.1 with cards set to "Fast-SCSI:10" in the Control Panel
- Adaptec files are available at: http://www.adaptec.com/worldwide/support/driverindex.html

MIDI:

Both USB and serial MIDI interfaces work effectively with Pro Tools. Digidesign recommends using a serial MIDI interface, as they offer the tightest possible MIDI timing. Serial MIDI interfaces require either a Mac serial port or a qualified modem-to-serial port adapter. Digidesign currently supports the GeeThree Stealth Port for G4 - AGP Video (Sawtooth), Stealth Port for Dual Processor G4s, or Griffin g4Port installed in the modem port (thereby not using a PCI slot).

When using the GeeThree products with OS 9.0.4, version 1.0.3 or higher of the Stealth Port extension is required, available here: http://www.geethree.com/download.html

Digidesign supports the following MIDI Interfaces for use with the 2001 models of Apple's G4s and Pro Tools® 5.1.1:

- MOTU Fastlane (USB)
- MIDIport32 2x2 (USB)
- AMT8 (USB/Serial)

While full testing will not be performed with older Pro Tools versions or older CPUs, we do not anticipate problems using these MIDI Interfaces.

Dual Monitor Display Card:

Digidesign has found only one configuration and card that appears to reliably achieve full Pro Tools performance when two monitors are desired. The card is called the Jeronimo 2000 by Appian. For information on installation, which must be followed very closely, and to download the required Mac driver for this card click here: http://www.digidesign.com/download/appian.html

SampleCell II Support:

The PCI Matchmaker chip on a SampleCell card must be rev QC or QE (check the end of the line

directly below "PCI"	Matchmaker" on th	e chip) to be	compatible. Car	ards with rev Q	chips can be
upgraded.					



Power Macintosh G4 (PCI Graphics) - Digi ToolBox XP Requirements

G4 (PCI Graphics) Processors of all speeds supported

See Apple's tech archive for more info on how to differentiate between AGP Graphics and PCI Graphics G4 models at: http://www.info.apple.com/kbnum/n58418

Power Macintosh G4 version history available at www.everymac.com

Mac OS 9.0.4 required (OS 9.1 not tested with these models)

QuickTime 4.1.2 required with Pro Tools v5.1.1 (included with Mac OS 9.0.4, Pro Tools installation CD, or download the standalone QuickTime 4.1.2 Installer from Apple)

Power Mac G4 ROM 1.8.1 Update required

Available from Apple at: http://asu.info.apple.com/swupdates.nsf/artnum/n11533

MIDI: Both USB and serial MIDI interfaces work effectively with Pro Tools. Digidesign recommends using a serial MIDI interface, as they offer the tightest possible MIDI timing. Serial MIDI interfaces require either a Mac serial port or a qualified modem-to-serial port adapter. Digidesign currently supports the **GeeThree Stealth Port** or **Griffin gPort** installed in the modem port (thereby not using a PCI slot).

When using the GeeThree products with OS 9.0.4, version 1.0.3 or higher of the Stealth Port extension is required, available here: http://www.geethree.com/download.html

External Floppy Diskette Drive

Although not required with Pro Tools installation, an external floppy diskette drive may be required for some Plug-Ins installations. The following external USB diskette drives are currently supported:

- Imation SuperDisk
- NewerTechnology uDrive
- SmartDisk (VST) Floppy Drive (model FDUSB-M) Note: Information on VST brand products from SmartDisk can be found at: www.smartdisk.com

Links to software and drivers are available in the Digidesign Support/Downloads/Utilities Section:

- SmartDisk (VST) Floppy Drive (model FDUSB-M)
- Imation SuperDisk
- NewerTechnology uDrive
- PACE USB Floppy Enabler

Apple's revised USB support allows for booting from a USB drive, therefore you should not boot up your system with an authorization disk inserted in the USB Drive.

SCSI HBA Card NOT required: Although Pro Tools LE supports a full 24 tracks of record and

playback on a dedicated ATA/IDE hard drive, use of a SCSI HBA card with a SCSI drive can increase some performance aspects of your system: for more information refer to the Audio Storage Requirements page. Optional SCSI HBA cards bundled (by Apple) with Power Macintosh computers are not compatible with this configuration due to the lack of NV RAM to store Pro Tools desired SCSI transfer rate.

The following SCSI HBA cards are qualified with the G4s listed at the top of this page:

ATTO ExpressPCI SCSI HBA card EPCI-DC only (ExpressPCI Dual Channel Ultra/WIDE HBA, also available in the Digidesign SCSI64 Kit), with the following requirements:

- ATTO ExpressPCI Firmware v1.4.4 f1
- ExpressPro-Tools v2.3.2 or higher with Synch Transfer Rate set to 20 (10) and PCI Burst Rate set to 32 bytes
- ATTO ExpressPCI Firmware v1.4.4 f1 is available at: http://www.digidesign.com/download/ptutil.html
- ATTO ExpressPro-Tools is available at: http://www.attotech.com/software/

-OR -

Adaptec Power Domain SCSI HBA 2906 with the following requirements:

- Firmware v1.1
- PowerDomain Control v5.1 with cards set to "Fast-SCSI:10" in the Control Panel
- Current Adaptec drivers are available at: http://www.adaptec.com/worldwide/support/driverindex.html
- Previous drivers are available at: ftp.adaptec.com/mac/scsi/



Power Macintosh Blue & White G3 - Digi ToolBox XP Requirements

Blue & White G3 Processors of all speeds supported

Mac OS 9.0.4 required (OS 9.1 not tested with these models)

QuickTime 4.1.2 required with Pro Tools v5.1.1 (included with Mac OS 9.0.4, Pro Tools installation CD, or download the standalone QuickTime 4.1.2 Installer from Apple)

G3 Firmware Update 1.1 required

Available from Apple at: http://asu.info.apple.com/swupdates.nsf/artnum/n11361

MIDI: Both USB and serial MIDI interfaces work effectively with Pro Tools. Digidesign recommends using a serial MIDI interface, as they offer the tightest possible MIDI timing. Serial MIDI interfaces require either a Mac serial port or a qualified modem-to-serial port adapter. Digidesign currently supports the GeeThree Stealth Port or Griffin gPort installed in the modem port (thereby not using a PCI slot).

When using the GeeThree products with OS 9.0.4, version 1.0.3 or higher of the Stealth Port extension is required, available here: http://www.geethree.com/download.html

External Floppy Diskette Drive

Although not required with Pro Tools installation, an external floppy diskette drive may be required for some Plug-Ins installations. The following external USB diskette drives are currently supported:

- Imation SuperDisk
- NewerTechnology uDrive
- SmartDisk (VST) Floppy Drive (model FDUSB-M) Note: Information on VST brand products from SmartDisk can be found at: www.smartdisk.com

Links to software and drivers are available in the Digidesign Support/Downloads/Utilities Section:

- SmartDisk (VST) Floppy Drive (model FDUSB-M)
- Imation SuperDisk
- NewerTechnology uDrive
- PACE USB Floppy Enabler

Apple's revised USB support allows for booting from a USB drive, therefore you should not boot up your system with an authorization disk inserted in the USB Drive.

SCSI HBA Card NOT required: Although Pro Tools LE supports a full 24 tracks of record and playback on a dedicated ATA/IDE hard drive, use of a SCSI HBA card with a SCSI drive can increase some performance aspects of your system: for more information refer to the Audio Storage Requirements page. Optional SCSI HBA cards bundled (by Apple) with Power Macintosh computers are not compatible with this configuration due to the lack of NV RAM to store Pro Tools desired SCSI transfer rate.

The following SCSI HBA cards are qualified with the G4s listed at the top of this page:

ATTO ExpressPCI SCSI HBA card EPCI-DC (ExpressPCI Dual Channel Ultra/WIDE HBA, also available in the Digidesign SCSI64 Kit) with the following requirements:

- ATTO ExpressPCI Firmware v1.4.4 f1
- ExpressPro-Tools v2.3.2 or higher with Synch Transfer Rate set to 20 (10) and PCI Burst Rate set to 32 bytes
- ATTO ExpressPCI Firmware v1.4.4 f1 is available at: http://www.digidesign.com/download/ptutil.html
- ATTO ExpressPro-Tools is available at: http://www.attotech.com/software/

—OR —

Adaptec Power Domain SCSI HBA cards including:

- 2906
- 2940UW
- 3940UW
- 2940U2W

with the following requirements:

- Firmware v4.1 (or v1.1 for the 2906)
- PowerDomain Control v5.1 with cards set to "Fast-SCSI:10" in the Control Panel
- Current Adaptec drivers are available at: http://www.adaptec.com/worldwide/support/driverindex.html
- Previous drivers are available at: ftp.adaptec.com/mac/scsi/



Power Macintosh Beige G3 - Digi ToolBox XP Requirements

Beige G3 Processors of all speeds supported

Mac OS 9.0.4 required (OS 9.1 not tested with these models)

QuickTime 4.1.2 or higher required with Pro Tools v5.1.1 (QT v4.1.2 included with Mac OS 9.0.4, Pro Tools installation CD, or download the standalone QuickTime 4.1.2 Installer from Apple. QuickTime 5.0.2 is also qualified)

SCSI HBA Card NOT required: Although Pro Tools LE supports a full 24 tracks of record and playback on a dedicated ATA/IDE hard drive, use of a SCSI HBA card with a SCSI drive can increase some performance aspects of your system: for more information refer to the Audio Storage Requirements page. Optional SCSI HBA cards bundled (by Apple) with Power Macintosh computers are not compatible with this configuration due to the lack of NV RAM to store Pro Tools desired SCSI transfer rate.

The following SCSI HBA cards are qualified for use with Beige G3s:

ATTO ExpressPCI SCSI HBA cards including:

- **PSC** (ExpressPCI Single Channel Ultra/WIDE HBA)
- **EPCI-DC** (ExpressPCI Dual Channel Ultra/WIDE HBA, also available in the Digidesign SCSI64 Kit)

with the following requirements:

- ATTO ExpressPCI Firmware v1.4.4 f1
- ExpressPro-Tools v2.3.2 or higher with Synch Transfer Rate set to 20 (10) and PCI Burst Rate set to 32 bytes
- ATTO ExpressPCI Firmware v1.4.4 f1 is available at: http://www.digidesign.com/download/ptutil.html
- ATTO ExpressPro-Tools is available at: http://www.attotech.com/software/

-OR -

Adaptec Power Domain SCSI HBA cards including:

- **.** 2906
- 2940UW
- 3940UW

• 2940U2W

with the following requirements:

- Firmware v4.1 (or v1.1 for the 2906)
- PowerDomain Control v5.1 with cards set to "Fast-SCSI: 10" in the Control Panel
- Current Adaptec drivers are available at: http://www.adaptec.com/worldwide/support/driverindex.html
- Previous drivers are available at: ftp.adaptec.com/mac/scsi/

Digi ToolBox XP & Digi ToolBox CD W ith Audiomedia III Card & Pro Tools LE for Windows 98 SE & Windows Me

Digi ToolBox XP

Digidesign Hardware Supplied with System

Audiomedia III Card

Digidesign Software Supplied with System

- Pro Tools LE 5.1.1
- D-Verb

Digi ToolBox CD Bundle

Digidesign Hardware Supplied with System

Audiomedia III Card

Digidesign Software Supplied with System

- Pro Tools LE 5.1.1
- D-Verb
- Maxim
- DINR

Note: MasterList CD is a Mac Only application included with the ToolBox CD Bundle. A Windows version is not available.

Third-Party MIDI Controllers & Interfaces

Optional Digidesign Software

Pro Tools LE Plug-In Finder

Optional Digidesign Hardware

- SampleCell II Plus
- SCSI64 Kit
- DigiDrive

Maximum Performance Guidelines

To provide full 24-track, 24-bit performance on Pro Tools LE with high edit densities and the maximum number of Plug-Ins follow these guidelines:

- Pentium III at 500 MHz or higher processor speed, Single Processor. Performance and the number of Plug-Ins will vary from PC to PC; however faster is better
- Total System RAM: 192 MB or higher
- File System (all drives): FAT32
- Also note that we have seen better performance on computers that have less components attached and non-custom versions of the BIOS or Windows 98 SE.

Known Incompatibilities

Caution - ToolBox is NOT supported on the following systems or systems with the following components:

- Hewlett Packard Pavillion line of computers
- AMD K6, K6-2 or K6-III, K7 processor based computers
- Original Pentium processor based computers (Pentium I)
- VIA chipset based motherboard computers
- Laptop Computers
- "ESS Solo-1 PCI AudioDrive"
 Sound, video and game controller.
 This device can be disabled from the "Device Manager" in the "System" Control Panel.

Need Advice on a Computer Purchase?

Be sure to check out the Windows User Configurations section of the Digidesign

User Conference for computer

recommendations from other Pro Tools LE users.

Disclaimer: Digidesign can not verify that the information in this forum will provide full functionality or performance. Please refer to these Compatibility Documents for • DigiDrive FireWire 80

Digidesign's official system requirements.

Supported CPU Models & Speeds

Highly Recommended: Intel Pentium III - Processors of all speeds supported, Single Processor Also Supported: Intel Pentium II - 300 MHz or faster, Single

Additional Computer Requirements

Processor

- System Software: Windows 98
 Second Edition or Windows Me (will NOT run on Windows XP, 2000, NT, 95, or 3.1)
- Total System RAM: 128 MB minimum 192 MB recommended (additional RAM required for simultaneous use with MIDI sequencers)
- Intel chipset and ATX motherboard
- Phoenix or Award BIOS (recommended)
- CD-ROM drive for software installation
- Floppy drive for installation of Maxim & DINR software included in ToolBox CD Bundle
- AGP or PCI graphic card
- Monitor, color required, minimum resolution of 1024 x 768
- One available PCI Slot
- Storage: 4GB hard drive space dedicated for audio (minimum). For maximum performance a dedicated qualified ATA/IDE, Firewire, or SCSI disk drive or drives is required.

Optional Third-Party SCSI HBA Card Adaptec AVA-2906

Non-ToolBox Audiomedia III card owners:

Owners of Audiomedia III cards that do not own Pro Tools software can purchase the upgrade to Pro Tools LE for ToolBox systems from the DigiStore or your local Digidesign Office

Digidesign Compatibility Documents Index

Digidesign 2001 Junipero Serra Blvd. Daly City, CA 94014-3886 U.S.A Tel 650.731.6300 Fax 650.731.6399 Product Information United States & Canada 1.800.333.2137 North & South America 650.731.6102 (USA) Europe (England) 44.1753.658496 Asia (Japan) 81.3.3505.7963

Audiomedia III Card for Windows 98SE/Me

Known Incompatibility with older Audiomedia III Cards:

A revision "QC" or later of the AMCC chip is required for compatibility with some PCs. This revision number appears on the AMCC chip following number "5933". This chip was revised to QC on the Audiomedia III to allow for compatibility with PCs that did not allow you to disable PCI Burst Mode (it was revised shortly thereafter to QE). Ways to identify these boards are in the grid below:

Board	S/N's Below	Manufactured Before	Board Rev Before
Audiomedia III	BK16376	3/18/97	Rev E

If a customer has previously updated their board (or received a refurbished card), the serial number will remain the same, but the board revision will be updated (and the AMCC chip will have "QC" or later). Cards with the revision "Q" chip can be upgraded. Please contact Digidesign Technical Support directly to arrange this.

Pro Tools FREE For Mac OS - System Requirements

Important information

The system requirements on this page are meant for general guideline purposes only. Digidesign cannot guarantee compatibility with any particular computer system, or various components installed on it.

Due to the giveaway nature of Pro Tools Free, this product is not eligible for technical support by telephone, fax or email. If you do have problems or technical questions, check the Pro Tools FREE Technical & Customer Support Information page for resources available to you.

Because Pro Tools FREE is limited to one third of the audio tracks supported by Pro Tools LE, users may find that it is compatible with some older/slower computers which are not included on these pages.

Digidesign Hardware Not Required

Digidesign Software VersionPro Tools 5.0.1 FREE

Compatible CPU Models

Highly Recommended:

- Power Macintosh G4
- PowerBook G3
- Power Macintosh Blue & White G3
- iMac

Also Compatible (must be 200 MHz or higher):

- Power Macintosh Beige G3
- Power Macintosh 9600
- Power Macintosh 9500

Additional Computer Requirements

- System Software: Mac OS v8.6
 & v9.x
- Total System RAM: 128 MB minimum, 192 MB recommended (Additional RAM required for simultaneous use with MIDI sequencers. Virtual memory is not supported)
- CD-ROM drive for software install (not necessary for web installer)
- Monitor or Laptop, color required, minimum resolution of 1024 x 768 (note: early iBook models have a maximum screen resolution of 800 x 600, see also Mbox iBook)
- Opcode OMS v2.3.8 or higher (supplied on Pro Tools FREE CD-ROM or download here)
- Apple QuickTime v4.0 or higher (supplied on Pro Tools FREE CD-ROM or download here)
- Storage: A large, fast, hard drive for audio.
- For maximum performance, a dedicated ATA/IDE or SCSI disk drive(s), such as those qualified with Pro Tools LE, should be used.

Third-Party MIDI Controllers & Interfaces

Optional Software - Plug-In Finder

Optional Digidesign Hardware

- SampleCell II Plus (requires PCI slot)
- SCSI64 Kit (requires PCI slot)
- DigiDrive

Not Tested:

- (requires SCSI connection)DigiDrive FireWire 80(requires firewire port)
- Powerbook G4 (Titanium)
- iBook

Digidesign Compatibility Documents Index

Digidesign 2001 Junipero Serra Blvd. Daly City, CA 94014-3886 U.S.A Tel 650.731.6300 Fax 650.731.6399 Product Information United States & Canada 1.800.333.2137 North & South America 650.731.6102 (USA) Europe (England) 44.1753.658496 Asia (Japan) 81.3.3505.7963

Pro Tools FREE is not intended for use with Digidesign hardware

How Audio Services Work

- Pro Tools FREE for Mac OS utilizes the Sound Manager
- Pro Tools FREE for Windows utilizes your standard Windows sound driver

Warning

Installing Pro Tools FREE on computers configured with Digidesign systems will render the existing Digidesign system inoperable. A complete reinstallation of the original Digidesign software will be necessary.

The only configuration that works with Pro Tools FREE is an Audiomedia III card running on Windows 98 Second Edition. Users of Pro Tools 4.x should note that the Audiomedia III card is not compatible with Pro Tools FREE on the Macintosh. Pro Tools LE and TDM versions are fully compatible with Digidesign hardware; these are the versions which should be used with Digidesign hardware.



Power Macintosh G4 - Pro Tools FREE Compatibility

All Power Macintosh G4 computers made in 1999 and 2000 have been tested and approved for compatibility.

Power Macintosh G4 version history available at www.everymac.com

Apple G4 Computers Supported:

Single Processor	Dual Processor	G4 Cube*
350MHz PowerPC G4	Dual 450MHz PowerPC G4	450MHz PowerPC G4
400MHz PowerPC G4	Dual 500MHz PowerPC G4	500MHz PowerPC G4
450MHz PowerPC G4		
500MHz PowerPC G4		

The following 2001/2002 models have not been tested for compatibility with Pro Tools FREE:

466MHz PowerPC G4	800MHz PowerPC G4	Dual 533MHz PowerPC G4
533MHz PowerPC G4	867MHz PowerPC G4	Dual 800MHz PowerPC G4
667MHz PowerPC G4	933MHz PowerPC G4	Dual 1GHz PowerPC G4
733MHz PowerPC G4		

Optional Compatibility Information

MIDI

MIDI: Both USB and serial MIDI interfaces work effectively with Pro Tools. Digidesign recommends using a serial MIDI interface, as they offer the tightest possible MIDI timing. Serial MIDI interfaces require either a Mac serial port or a qualified modem-to-serial port adapter. Digidesign currently supports the **GeeThree** Stealth Port for G4 - PCI Video (Yosemite),

^{*}Note: Pro Tools FREE will experienced a drop in performance when the USB speakers provided with the G4 Cube are plugged in.

GeeThree Stealth Port for G4 - AGP Video (Sawtooth), Stealth Port for Dual Processor G4s, or Griffin Technology gPort (G4 PCI graphics) or g4Port (AGP graphics) installed in the modem port (thereby not using a PCI slot).

When using the GeeThree products with OS 9.0.4, version 1.0.3 or higher of the Stealth Port extension is required, available here: http://www.geethree.com/download.html

SampleCell II

The PCI Matchmaker chip on a DSP Farm must be rev QC or QE (check the end of the line directly below "PCI Matchmaker" on the chip) to be compatible with G4s containing PCI slots*. Cards with rev Q chips can be upgraded. Please contact Digidesign Technical Support to upgrade SampleCell II cards.

Qualified External Diskette Drives

Although not required with Pro Tools FREE installation, an external diskette drive may be required for installation of some Plug-Ins and optional software applications. The following external USB diskette drives are currently supported:

- Imation SuperDisk
- NewerTechnology uDrive
- VST Floppy Drive (model FDUSB-M) Note: Information on VST brand products from SmartDisk has been moved to www.smartdisk.com

Links to software and drivers are available in the Digidesign Support/Downloads/Utilities Section:

- VST Floppy Drive (model FDUSB-M)
- Imation SuperDisk
- NewerTechnology uDrive
- Pace USB Floppy Enabler

Apple's revised USB support allows for booting from a USB drive, therefore you should not boot up your system with an authorization disk inserted in the USB Drive.

SCSI HBA Card NOT Required

Although Pro Tools FREE supports record and playback on a ATA/IDE hard drive, use of a SCSI HBA card (SCSI accelerator card) with a SCSI drive is recommended. For more information you can refer to the Pro Tools LE Audio Storage Requirements page. Optional SCSI HBA cards bundled (by Apple) with Power Macintosh computers are not compatible with this configuration due to the lack of NV RAM to store Pro Tools desired SCSI transfer rate. The following SCSI HBA cards are qualified with the G4s containing PCI slots* listed at the top of this page:

Adaptec Power Domain SCSI HBA 2906 with the following requirements:

- Firmware v1.1
- PowerDomain Control v5.1 with cards set to "Fast-SCSI:10" in the Control Panel
- Current Adaptec drivers are available at: http://www.adaptec.com/worldwide/support/driverindex.html
 Previous drivers are available at: ftp.adaptec.com/mac/scsi/

-OR -

ATTO ExpressPCI SCSI HBA card EPCI-DC (ExpressPCI Dual Channel Ultra/WIDE HBA, also available in the Digidesign SCSI64 Kit) with the following requirements:

- ATTO ExpressPCI Firmware v1.4.4 f1
- ExpressPro-Tools v2.3.2 or higher with Synch Transfer Rate set to 20 (10) and PCI Burst Rate set to 32 bytes. Note: Mac OS 9.2 requires ATTO ExpressPro-Tools v2.7 or higher.
- ATTO ExpressPCI Firmware v1.4.4 f1 is available at: http://www.digidesign.com/download/ptutil.html
- ATTO ExpressPro-Tools is available at: http://www.attotech.com/software/

*Note: Use of a SCSI HBA card requires at least one PCI slot. Apple computers that do not contain PCI slots, such as the G4 Cube, can not use a SCSI HBA card.

Firewire Drives

Although Firewire drives have not been tested by Digidesign with Pro Tools FREE, Digidesign has enough confidence in the performance ability of the latest Firewire bridge technology, the Oxford 911 chipset, to inform Pro Tools customers that Firewire drives are an option when used with the guidelines listed on the DigiDrive FireWire 80 Requirements page.

PowerBook G3 - Pro Tools FREE Compatibility

The following PowerBook G3s are compatible

- PowerBook G3 Pismo
- PowerBook G3 Wallstreet

PowerBook G3 version history available at www.everymac.com

Storage needs for PowerBooks

The hard drives contained in PowerBooks are usually much slower than those in desktop computers. This will effect Pro Tools FREE performance. A dedicated second internal or external hard drive which follow the Pro Tools LE Audio Storage Requirements as closely as possible is recommended.

Optional Compatibility Information

Qualified External Diskette Drives

Although not required with Pro Tools FREE installation, an external diskette drive may be required for installation of some Plug-Ins and optional software applications. The following external USB diskette drives are currently supported:

- Imation SuperDisk
- NewerTechnology uDrive
- VST Floppy Drive (model FDUSB-M) Note: Information on VST brand products from SmartDisk has been moved to www.smartdisk.com

Links to software and drivers are available in the Digidesign Support/Downloads/Utilities Section:

- VST Floppy Drive (model FDUSB-M)
- Imation SuperDisk
- NewerTechnology uDrive
- Pace USB Floppy Enabler

Apple's revised USB support allows for booting from a USB drive, therefore you should not boot up your system with an authorization disk inserted in the USB Drive.



Power Macintosh Blue & White G3 - Pro Tools FREE Optional Compatibility Information

G3 Firmware Update 1.1 required

Available from Apple at: http://asu.info.apple.com/swupdates.nsf/artnum/n11361

MIDI

MIDI: Both USB and serial MIDI interfaces work effectively with Pro Tools. Digidesign recommends using a serial MIDI interface, as they offer the tightest possible MIDI timing. Serial MIDI interfaces require either a Mac serial port or a qualified modem-to-serial port adapter. Digidesign currently supports the **GeeThree Stealth Port** or **Griffin gPort** installed in the modem port (thereby not using a PCI slot).

When using the GeeThree products with OS 9.0.4, version 1.0.3 or higher of the Stealth Port extension is required, available here: http://www.geethree.com/download.html

Qualified External Diskette Drives

Although not required with Pro Tools FREE installation, an external diskette drive may be required for installation of some Plug-Ins and optional software applications. The following external USB diskette drives are currently supported:

- Imation SuperDisk
- NewerTechnology uDrive
- VST Floppy Drive (model FDUSB-M) Note: Information on VST brand products from SmartDisk has been moved to www.smartdisk.com

Links to software and drivers are available in the Digidesign Support/Downloads/Utilities Section:

- VST Floppy Drive (model FDUSB-M)
- Imation SuperDisk
- NewerTechnology uDrive
- Pace USB Floppy Enabler

Apple's revised USB support allows for booting from a USB drive, therefore you should not boot up your system with an authorization disk inserted in the USB Drive.

SCSI HBA Card NOT Required

Although Pro Tools FREE supports record and playback on a ATA/IDE hard drive, use of a SCSI

HBA card with a SCSI drive is recommended. For more information you can refer to the Pro Tools LE Audio Storage Requirements page. Optional SCSI HBA cards bundled (by Apple) with Power Macintosh computers are not compatible with this configuration due to the lack of NV RAM to store Pro Tools desired SCSI transfer rate. The following SCSI HBA cards are qualified with the Blue & White G3s:

Adaptec Power Domain SCSI HBA 2906 with the following requirements:

- Firmware v1.1
- PowerDomain Control v5.1 with cards set to "Fast-SCSI: 10" in the Control Panel
- Current Adaptec drivers are available at: http://www.adaptec.com/worldwide/support/driverindex.html
 Previous drivers are available at: ftp.adaptec.com/mac/scsi/

—OR —

ATTO ExpressPCI SCSI HBA card EPCI-DC (ExpressPCI Dual Channel Ultra/WIDE HBA, also available in the Digidesign SCSI64 Kit) with the following requirements:

- ATTO ExpressPCI Firmware v1.4.4 f1
- ExpressPro-Tools v2.3.2 or higher with Synch Transfer Rate set to 20 (10) and PCI Burst Rate set to 32 bytes
- ATTO ExpressPCI Firmware v1.4.4 f1 is available at: http://www.digidesign.com/download/ptutil.html
- ATTO ExpressPro-Tools is available at: http://www.attotech.com/software/

iMac —Pro Tools FREE

Optional Compatibility Information

Qualified External Diskette Drives

Although not required with Pro Tools FREE installation, an external diskette drive may be required for installation of some Plug-Ins and optional software applications. The following external USB diskette drives are currently supported:

- Imation SuperDisk
- NewerTechnology uDrive
- VST Floppy Drive (model FDUSB-M) Note: Information on VST brand products from SmartDisk has been moved to www.smartdisk.com

Links to software and drivers are available in the Digidesign Support/Downloads/Utilities Section:

- VST Floppy Drive (model FDUSB-M)
- Imation SuperDisk
- NewerTechnology uDrive
- Pace USB Floppy Enabler

Apple's revised USB support allows for booting from a USB drive, therefore you should not boot up your system with an authorization disk inserted in the USB Drive.



Third-Party MIDI Hardware - Pro Tools FREE

Third-Party MIDI Control Surfaces

CM Labs Motor Mix: For information about this product, visit the new Digidesign Development Partner website at www.digidevelopers.com

Note: Profiles for Motor Mix and other MIDI control surfaces that are supported with Pro Tools LE are included in the CD-ROM version of Pro Tools FREE. While these other control surfaces may work with Pro Tools FREE, only Motor Mix has been fully tested by Digidesign.

Third-Party MIDI Interfaces

Both USB and serial MIDI interfaces work effectively with Pro Tools FREE. Digidesign recommends using a serial MIDI interface, as they offer the tightest possible MIDI timing. Serial MIDI interfaces require either a Mac serial port or a qualified modem-to-serial port adapter, such as the GeeThree Stealth Port or Griffin gPort II installed in the modem port (thereby not using a PCI slot).

When using the GeeThree products with OS 9.0.4, version 1.0.3 or higher of the Stealth Port extension is required, available here: http://www.geethree.com/download.html

Optional Digidesign Software - Pro Tools FREE for Mac

Note: A Digidesign-qualified external diskette drive (USB floppy drive) is required for most software installations when used with Macintosh Blue & White G3, G4, or laptop models. Exceptions are pointed out below.

- **DigiTranslator** v2.0 Macintosh Only. DigiTranslator 2.0 includes DigiTranslator 1.0, which is compatible with Pro Tools FREE 5.0.1 sessions [additional information]
- **DINR** v3.3.1: (AudioSuite)
- **D-Fi** v1.4.1 (RTAS and AudioSuite)
- **D-fx** v1.2.1 (AudioSuite)
- **D-Verb RTAS** v1.7.2 (RTAS), does not require a floppy drive, download-only, \$49.95 (USD) Pro Tools FREE version available from the DigiStore
- **D-Verb** v1.7.1 (RTAS and AudioSuite)
- **Focusrite d3** v1.3.1 (AudioSuite)
- **Maxim** v1.2.1 (RTAS and AudioSuite)
- MasterList CD v2.4 Macintosh Only [additional information]
- \bullet MP3 Export v1.0 does not require a floppy drive, download-only, available from the <code>DigiStore</code>
- SampleCell Editor v3.0 (w/SampleCell II Plus), does not require a floppy drive
- Soft SampleCell v3.0 Mac Only [additional information]
- **SoundReplacer** v1.1.1 (AudioSuite)

Note: Most RTAS and/or AudioSuite Plug-Ins from Digidesign's Development Partners are compatible with Pro Tools FREE. (for a list of possible optional plug-ins, use the Digi 001 Plug-In Finder in the Products section of the website) However, some manufacturer's Plug-Ins are not enabled for use with Pro Tools FREE. (Antares and Bomb Factory plug-ins are not compatible with Pro Tools FREE) Before purchasing any RTAS or AudioSuite Plug-In for use with Pro Tools FREE, we recommend checking compatibility with the manufacturer.

Important information

The system requirements on this page are meant for general guideline purposes only. Digidesign cannot guarantee compatibility with any particular computer system, or various components installed on it.

Due to the giveaway nature of Pro Tools Free, this product is not eligible for technical support by telephone, fax or email. If you do have problems or technical questions, check the Pro Tools FREE Technical & Customer Support Information page for resources available to you.

Because Pro Tools FREE is limited to one third of the audio tracks supported by Pro Tools LE, users may find that it is compatible with some older/slower computers which are not included on these pages.

Digidesign Hardware Not Required

Digidesign Software VersionPro Tools 5.0.1 FREE Revision 2

Compatible CPU Models

Highly Recommended:

 Intel Pentium III - Processors of all speeds are compatible, desktop or laptop, single processor

Have been reported as compatible by some users:

- Intel Pentium II desktop or laptop, single processor, 300 MHz or faster
- Intel Celeron, 300 MHz or faster
- AMD Athlon

Known Incompatibilities

Caution - Pro Tools FREE has been

Additional Computer Requirements

- System Software: Windows Me or Windows 98 Second Edition (will NOT run on Windows XP, 2000, NT, 95, or 3.1)
- Total System RAM: 128 MB minimum 192 MB recommended (Additional RAM required for simultaneous use with MIDI sequencers.)
- Intel chipset
- Phoenix or Award BIOS (recommended)
- CD-ROM drive for software install
- AGP or PCI graphic card
- Monitor, color required, minimum resolution of 1024 x 768
- Storage: A large, fast, hard drive for audio.
- For maximum performance, a dedicated ATA/IDE or SCSI disk drive(s), such as those qualified with Pro Tools LE, should be used.

Third-Party MIDI Controllers & Interfaces

Optional Software - Plug-In Finder

Optional Digidesign Hardware

SampleCell II Plus - SampleCell software must be installed before Pro Tools FREE is installed.

Optional Third-Party SCSI HBA Card Adaptec AVA-2906

Maximum Performance Guidelines

Pentium III at 500 MHz or higher processor speed, Single Processor. Performance and the number of Plug-Ins will vary from PC to PC; however faster is better Total System RAM: 192 MB or higher File System (all drives): FAT32

Also note that we have seen better performance on computers that have less components attached and non-custom problematic with the following systems or systems with the following components:

- Some Sony VAIO computers
- Some Hewlett Packard Pavillion computers
- Cyrix processor based computers
- AMD K6, K6-2 or K6-III, K7 processor based computers
- Original Pentium processor based computers (Pentium I)
- VIA chipset based motherboard computers
- "ESS Solo-1 PCI AudioDrive"
 Sound, video and game controller.
 This device can be disabled from the "Device Manager" in the "System" Control Panel.

versions of the BIOS or Windows.

Need Advice on a Computer Purchase?
Be sure to check out the Windows User
Configurations section of the Digidesign
User Conference for computer

recommendations from other Pro Tools LE users.

Disclaimer: Digidesign can not verify that the information in this forum will provide full functionality or performance. Please refer to these Compatibility Documents for Digidesign's official system requirements.

Digidesign Compatibility Documents Index

Digidesign 2001 Junipero Serra Blvd. Daly City, CA 94014-3886 U.S.A Tel 650.731.6300 Fax 650.731.6399 Product Information United States & Canada 1.800.333.2137 North & South America 650.731.6102 (USA) Europe (England) 44.1753.658496 Asia (Japan) 81.3.3505.7963

Laptop PC - Pro Tools FREE Compatibility

The following Laptop PCs have been reported as compatible by some users:

- Dell Inspiron 3500
- Dell Inspiron 3800
- Dell Latitude cpi
- Gateway Solo 9300XL
- Sony VAIO Z505

We expect other PC laptops that follow the Pro Tools Free For Windows 98/Me System Requirements to be compatible.

Storage needs for Laptops

The hard drives contained in Laptops are usually much slower than those in desktop computers. This will effect Pro Tools FREE performance. A dedicated second internal or external SCSI drive which follow the Pro Tools LE Audio Storage Requirements as close as possible is recommended.

Windows Millennium & 98 Second Edition Settings & Requirements

- Each IDE drive must have DMA enabled in the "System" Control Panel. This can be changed in the "Settings" of each IDE drive on the "Device Manager" tab of the "System" Control Panel. For detailed instructions click here
- Auto Insert Notification must be disabled for all CD-ROM and removable media drives (such as Zip Drives). This can be changed in the "Settings" of each of these types of drives on the "Device Manager" tab of the "System" Control Panel. For more information click here
- Although not a requirement, removing or disabling startup applications, system utilities (i.e. Norton Utilities) internal and external hardware devices (i.e. tape drives, Ethernet cards, scanners, TV tuners, non-Digidesign sound or MIDI drivers) may increase the performance of Pro Tools LE. Just keep in mind: the more you demand of Pro Tools the more Pro Tools demands of your system.

Additional Notes:

- Pro Tools FREE can NOT be installed on systems running Windows XP, 2000, NT, 95, or 3.1.
- While Windows 98 First Edition may run Pro Tools FREE, only Millennium & 98 Second Edition have been tested by Digidesign.
- Double-byte character version of Windows is currently not supported (i.e. Japanese, Chinese, Korean, Arabic)

Dual Boot Systems

If you have a new PC that only has Windows XP or Windows 2000 on it, you will need to also install a compatible operating system on a separate partition or hard drive in order to use Pro Tools FREE for Windows 98 SE or Windows Me. These are a couple of programs that help you create a "dual boot" system, allowing you to use more than one operating system on the same computer:

- PartitionMagic®
- System Commander® 2000

Optional Digidesign Software - Pro Tools FREE for Windows

- **DINR** v3.3.1: (AudioSuite)
- **D-Fi** v1.4.1 (RTAS and AudioSuite)
- **D-fx** v1.2.1 (AudioSuite)
- **D-Verb RTAS** v1.7.2 (RTAS) download-only, \$49.95 (USD) Pro Tools FREE version available from the DigiStore
- **D-Verb** v1.7.1 (RTAS and AudioSuite)
- **Focusrite d3** v1.3.1 (AudioSuite)
- **Maxim** v1.2.1 (RTAS and AudioSuite)
- MP3 Export v1.0 download-only, available from the DigiStore
- SampleCell Editor v2.1.3 (w/SampleCell II Plus)
- **SoundReplacer** v1.1.1 (AudioSuite) **Note:** Currently, SoundReplacer does not work with Pro Tools FREE for Windows.

Note: Most RTAS and/or AudioSuite Plug-Ins from Digidesign's Development Partners are compatible with Pro Tools FREE. For a list of possible optional plug-ins, use the Digi 001 Plug-In Finder in the Products section of the website. However, some manufacturer's Plug-Ins are not enabled for use with Pro Tools FREE. (Antares and Bomb Factory plug-ins are not compatible with Pro Tools FREE) Before purchasing any RTAS or AudioSuite Plug-In for use with Pro Tools FREE, we recommend checking compatibility with the manufacturer.

March 25, 2002 Revisions Consisted of the Following:

Added Pro Tools LE 5.2.1 for Macintosh DigiStudio Requirements

March 19, 2002 Revisions Consisted of the Following:

Added 2002 G4 Qualification

March 1, 2002 Revisions Consisted of the Following:

Added Mbox Compatibility Information

February 15, 2002 Revisions Consisted of the Following:

Added DigiDrive FireWire 80 Compatibility Information

Added Avid Unity MediaNet Compatibility Information

January 17, 2002 Revisions Consisted of the Following:

Added Pro Tools|HD System for Mac OS Compatibility Information

December 18, 2001 Revisions Consisted of the Following:

Intel Pentium 4 Processors added to the list of approved configurations for the following systems:

- Pro Tools|24 MIX, MIXplus & MIX³ for Windows 2000
- Digi 001 for Windows 98 SE & Windows Me

November 9, 2001 Revision Consisted of the Following:

- DigiTranslator 2.0 explanation of features, requirements, and differences from version 1.0
- FilmFrame 2.0 explanation of features, requirements, and differences from version 1.0
- Pro Tools 5.1.3 explanation of features and compatibility with Pro Tools 5.2 for DigiStudio

October 4, 2001 Revision Consisted of the Following:

Updated Status Report on Digidesign Qualification Plan for 2001 G4 Models

September 13, 2001 Revisions Consisted of the Following:

Pro Tools 5.2 for DigiStudio Requirements

Pro Tools 5.2 introduces support for Digidesign's DigiStudio, a virtual recording studio environment that allows multiple Pro Tools users to collaborate within the same session simultaneously along with other musicians and audio professionals using Pro Tools—right over the Internet. Collaborators enjoy "rich interchange" of material, sharing all elements of their sessions—from audio and MIDI tracks to plug-in settings to automation. Pro Tools 5.2 software builds on Pro Tools 5.1.1 software by adding DigiStudio Internet collaboration support. For comatibility information, see the Pro Tools 5.2 for DigiStudio Requirements

August 27, 2001 Revisions Consisted of the Following:

Firewire Drives With Pro Tools

Digidesign has performed preliminary tests using Firewire drives with Pro Tools. Although Firewire drives are not yet officially supported by Digidesign, Digi has enough confidence in the performance ability of the latest Firewire bridge technology, the Oxford 911 chipset, to inform Pro Tools customers that Firewire drives are an option when used with the guidelines listed on the Firewire Hard Drives With Pro Tools page.

August 16, 2001 Revisions Consisted of the Following:

Magma 4 Slot/PowerBook G4 Combination Approved for MIX Systems

The Magma 4 Slot CardBus PCI Expansion System and Apple Titanium PowerBook G4 are now Digidesign approved with Pro Tools | 24 MIX, MIXplus & MIX³ systems.

For further requirements see the PowerBook G4 - Pro Tools 24 MIX Requirements

Aurora Fuse Information – Third-Party Video Capture Cards with all Pro Tools 5.1.x Systems

Aurora Fuse – Though the Aurora Fuse card is not officially qualified to work with the
above Pro Tools systems, many users are having satisfactory results provided they
install Aurora Fuse drivers 2.0.2 or higher. These drivers are available for free download
from the Digidesign Support/Downloads/Utilities & Links

July 11, 2001 Revision Consisted of the Following:

Digi 001 now qualified with Athlon

Digidesign announces the qualification of Athlon-based PCs for use with Digi 001 and Pro Tools LE v5.1.1. To provide full 24-track, 24-bit performance on Pro Tools LE with high edit densities

and the maximum number of Plug-Ins with the AMD Athlon follow these guidelines:

- AMD Athlon Thunderbird processor required (all speeds, single processor only)
- Motherboard with VIA KT133A chipset required (pure VIA chipset)
- Digidesign qualified ATA/IDE disk drive required
- For further requirements see the Digi 001 Windows Compatibility Documents

Qualification was conducted with the Abit KT7A motherboard. Note that motherboards with mixed chipsets from AMD and VIA can result in intermittent DAE 6045 errors; these motherboards are not supported by Digidesign.

June 19, 2001 Revision Consisted of the Following:

- Pro Tools | 24 and Pro Tools | 24 MIX systems compatibility with Pro Tools 5.1.1 for Windows 2000
- Pro Tools 5.1.1 for Mac, Pro Tools LE 5.1.1 for Mac & Windows 98SE/Me compatibility added.
- Digidesign qualification for current 2001 Apple G4 models completed

May 29, 2001 Revision Consisted of the Following:

- Qualified the PowerBook G4 using the Magma 2-Slot Expansion Chassis System with Pro Tools|24 MIX & MIXplus
- Qualified the PowerBook G4 using the Magma 2-Slot Expansion Chassis System with the Digi 001

April 26, 2001 Revision Consisted of the Following:

Updated Status Report on Digidesign Qualification Plan for 2001 G4 Models

March 16, 2001 Revision Consisted of the Following:

- Qualified the IBM IntelliStation E Pro model 6846 for Pro Tools | 24 MIX with Pro Tools 5.0.1 for Windows NT. (updated June 19 for Pro Tools 5.1.1 for Windows 2000)
- Updated Status Report on Digidesign Qualification Plan for 2001 G4 Models

February 1, 2001 Revision Consisted of the Following:

- Pro Tools v5.1 information for all Pro Tools 24, Pro Tools 24 MIX and MIXplus systems using Mac OS.
- Pro Tools LE v5.1 information for all Digi 001 and ToolBox XP systems using Mac OS, Windows 98SE, and Windows Me.

• Pro Tools v5.0.1 Compatibility Documents archived.

January 18, 2001 Revision Consisted of the Following:

Added Status Report on Digidesign Qualification Plan for 2001 G4 Models

January 10, 2001 Revision Consisted of the Following:

- Added detailed list of currently unsupported G4 (AGP Graphics) models announced by Apple on January 9. Testing on these new computers has not been completed. Details will be added to the Compatibility Documents as soon as test results are final.
- Mac OS 9.1 (released by Apple on January 9) is not yet supported. Details will be added to the Compatibility Documents as soon as test results are final.
- Pro Tools III PCI systems are now supported with PostConform v2.0cs1

December 12, 2000 Revision Consisted of the Following:

- IDE/ATA drives are now qualified for 32 track performance with Mac TDM systems. See this link for details.
- The Access Virus Plug-In requires a Pro Tools | 24 MIX or MIXplus system, stated on the software page.
- The new D-Verb RTAS Plug-In for Pro Tools FREE has been added to the Pro Tools FREE software pages for Mac and Windows.
- MP3 Export Option has been added to all Pro Tools optional software pages.





Get Power to burn with the latest Macs!

Go to the Apple Music & Audio website for info on upgrading your Mac audio workstation and the latest Mac audio happenings.

Pro Tools|HD Product Family Compatibility

Supported Hardware, Software, and CPU Configurations

Pro Tools 5.3 software will only support the Pro Tools HD system for Mac OS.

Support for Pro Tools|HD systems on the Windows platform will be added after this initial release

The following items have been officially qualified for use with Pro Tools|HD systems. Qualification is an ongoing process, so please refer to the complete Digidesign Compatibility Documents for the latest compatibility information, including the main page for Pro Tools|HD for Mac OS Compatibility Information

CPU Models - Apple G4 (AGP Graphics) Computers Supported

Single Processor	Dual Processor (see Known Issues)
350MHz Power Mac G4	Dual 450 MHz Power Mac G4
400 MHz Power Mac G4	Dual 500 MHz Power Mac G4
450 MHz Power Mac G4	Dual 533 MHz Power Mac G4
500 MHz Power Mac G4	Dual 800 MHz Power Mac G4

466 MHz Power Mac G4 Dual 1 GHz Power Mac G4

533 MHz Power Mac G4

667 MHz Power Mac G4

733 MHz Power Mac G4 (with level 3 cache)

733 MHz Power Mac G4 (without level 3 cache)

800 MHz Power Mac G4

867 MHz Power Mac G4

933 MHz Power Mac G4

Digidesign Audio Interfaces

At least one required for Pro Tools | HD:

- 192 I/O
- 192 Digital I/O
- 96 I/O

Connect to 192 I/O, 192 Digital I/O or 96 I/O Legacy Port:

- 888|24 I/O
- 882 | 20 I/O
- 1622 I/O
- 24-Bit ADAT Bridge I/O

Digidesign Peripherals

• SYNC I/O

PCI Cards

- HD Core
- HD Process
- Aurora Fuse Video Capture Card

Storage

- DigiDrive® SCSI Drives
- DigiDrive® FireWire 80
- Digidesign SCSI64 Kit
- ATTO EPCI-DC SCSI card
- ATTO ExpressPro Tools disk utility v2.7 or higher, available at:

www.attotech.com/software

Optional Software

- Soft SampleCell (up to 48 kHz)
- MachineControl
- DigiTranslator 1.0

Control Surfaces

- ProControl (up to 5 fader packs)
- Edit Pack
- Control24

Expansion Chassis

- Digidesign Pro Tools Expansion Chassis 13-Slot
- Digidesign Pro Tools Expansion Chassis 7-Slot
- Magma 7-slot 64-bit 33MHz Expansion Chassis (model # PCI7R6433)

MIDI Interfaces

- MIDI I/O (not yet shipping)
- E-Magic Unitor8
- E-Magic AMT8
- MOTU MTP AV
- Opcode Studio 64XTC

Dual Monitor AGP Graphics Cards

- Appian Jeronimo[™]2000 Macintosh (with version 1.4.1 drivers and the included firmware update. additional notes)
- ProMax DH-Max (disable ProMax drivers when using with Pro Tools. Both monitors set to "thousands of colors" instead of 256. Not yet qualified with 13-slot chassis)
- NVIDIA GeForce4 MX (as shipped from Apple standard on the 933 MHz & Dual 1 GHz Power Mac G4 models)
- ATI Radeon 7500 (as shipped from Apple standard on the 800 MHz Power Mac G4)

Note: As of March 2002, the upcoming NVIDIA GeForce4 Titanium built-to-order option from Apple not yet shipping or tested.

* ProMax DH-Max Notes: Occasionally when booting a system with the ProMax DH-Max dual monitor card, the top portion of the monitors are black, the apple menu bar appears in the middle of the screen, the bottom portion of the desktop is unreachable, or the desktop may be offset to one side. A reboot will usually solve this problem. Otherwise, you can open the Monitor control panel and rearrange the monitors.

Miscellaneous

- GeeThree Stealth Port for G4 Modem-to-Serial converter
- Griffin g4Port modem-serial converter

Known Issues:

- 1. The "Quicksilver" G4 models require OS 9.2, 9.2.1, or 9.2.2 to run Pro Tools. Users should not attempt to install OS 9.1, or run OSX, (including Classic mode), with Pro Tools on these machines. The Quicksilver G4 models have been tested with the Mac OS as shippped from Apple on these machines, with a dual boot system which includes both OS 9.2.x and OS X. It is absolutely necessary to boot from OS 9.2.x in order to run Pro Tools. Although you cannot use Pro Tools with OS X or in "Classic" mode under OS X, it is not necessary to remove OS X from these "Quicksilver" G4 computers.
- 2. Additional Mac OS Notes: Mac OS 9.2 and 9.2.1 have only been tested with the Quicksilver G4 models. Earlier models that do not require OS 9.2 have not been tested for compatibility with Mac OS 9.2 or higher. In addition, you should not install OS X on the same partition or hard drive with Mac OS 9.x that you use as your startup drive for Pro Tools on pre-Quicksilver G4 models.
- 3. **Pro Tools currently does not utilize the second processor in dual processor Power Mac G4 models**. If problems (such as -6042 errors) occur when using Pro Tools on one of these machines, Digidesign recommends the following: Move the folder named "Multiprocessing" from the System Folder "Extensions" folder to the "Extensions (Disabled)" folder and restart.
- 4. The use of 6 or 7 HD cards with expansion chassis requires Mac OS 9.2.2.

See Apple's tech archive on how to differentiate between AGP Graphics and PCI Graphics G4 models at: www.info.apple.com/kbnum/n58418

Power Macintosh G4 version history and specifications are available at www.everymac.com and www.applespec.com

Not Supported at Initial Release

Pro Tools 5.3 software does not include support for the following features and options.

- Features and fixes added in Pro Tools 5.1.3
- Unity MediaNet Shared Storage Systems
- AVoption and AVoption | XL
- DigiStudio internet collaboration
- DigiTranslator 2.0
- PostConform

Digidesign plans to add support for each of the above items as part of a future Pro Tools software release for Pro Tools|HD.

Other Digidesign PCI cards are not compatible with Pro Tools | HD Systems

Previous Digidesign PCI cards are incompatible with the new HD system. You cannot combine Pro Tools | HD and these PCI cards, either in the CPU or an expansion chassis. Doing so will cause crashes, or the CPU will simply fail to boot. The following Digidesign cards are not compatible with HD systems:

- MIX Core card
- MIX Farm card
- MIX I/O card
- d24 card (Pro Tools | 24 core card)
- DSP Farm card (Pro Tools III/Pro Tools 24)
- Digi 001
- Audiomedia III
- Pro Tools III Disk I/O
- Pro Tools Project card
- Project II card

SampleCell II Card without TDM module

The one exception is the SampleCell II card, although the TDM bus cannot be connected to the Pro Tools HD card because the SampleCell TDM Module is not compatible with Pro Tools | HD systems. SampleCell II cards can be utilized in Pro Tools | HD systems using Aux tracks to route the SampleCell I/O Analog outputs physically between the card and audio peripherals. In addition, you must install the DigiSystem Init v 5.1.1 in your Extensions folder. (included on the Pro Tools 5.3 CD) Playback is limited to samples at 44.1 and 48 kHz.

The following Digidesign hardware is not compatible with Pro Tools | HD systems:

- Universal Slave Driver
- Video Slave Driver
- SMPTE Slave Driver
- SampleCell II TDM Module

Continue on to the main page for Pro Tools|HD for Mac OS Compatibility Information

BEFORE YOU CLICK ON A LINK, PLEASE SEE "ABOUT THESE DOCUMENTS"

Manuals and Documents

Pro Tools 5.3 for Pro Tools | HD Systems

(mac only at initial release)

Whats New in Pro Tools 5.3 (160 k)

Getting Started With HD (1.6 MB) [note]

Pro Tools 5.3 Read Me (48 k)

Pro Tools 5.3 Reference Guide (7 MB)

Pro Tools Menus Guide (1 MB)

192 I/O Guide (1 MB)

192 Digital I/O Guide (678 k)

96 I/O Guide (889 k)

SYNC I/O Guide (2 MB)

SYNC I/O Read Me (25 k)

Calibration Mode (56 k)

Digidesign Control Panel (45 k)

DigiTest 5.3 Read Me (43 k)

MIDI Control Surfaces Guide (1.4 MB)

StreamManager 128 Read Me (37 k)

Pro Tools Expanded Systems Guide (543 k, includes

Pro Tools HD & MIX systems)

Pro Tools LE 5.2 for Mbox (Mac)

Getting Started with Mbox (667 k)

Pro Tools LE 5.2 Read Me (41 k)

Pro Tools LE 5.2.1 Read Me (23 k)

DigiStudio (Pro Tools 5.2 for Mac TDM & LE)

DigiStudio Guide (1.8 MB)

DigiStudio Read Me (42 k)

Pro Tools LE 5.2.1 Read Me (23 k)

Pro Tools 5.1.3 for Macintosh TDM Systems

Pro Tools 5.1.3 Addendum (535 k) includes "What's

New in Pro Tools 5.1.3"

PT 5.1.3 Read Me (62 k)

Pro Tools 5.1.1 for Mac & Win TDM & LE

Pro Tools 5.1.1 Addendum (492 k) includes "What's

New in Pro Tools 5.1.1"

PT 5.1.1 Read Me (56 k)

PT 5.1.1 Win2000 TDM Read Me (43 k)

PT 5.1.1 Win2000 TDM Installation Guide (1 MB)

5.1.1 Digidesign Plug-Ins Read Me (48 k)

About These Documents

For best results, **download large documents first** to your local hard drive instead of opening using the Acrobat browser plug-in. Opening large Acrobat documents using the browser can cause your browser to freeze. Right-click (2-button mouse) or Control-click (one-button Mac mouse) on the pdf link and choose "Save Link As..." or "Save Target As..." to download the document to your computer, then open it using Acrobat Reader. In some browsers, holding your single mouse button down on the link will also display these options.



to read .pdf docs:



Pro Tools FREE 5.0.1 Documents

Pro Tools FREE Complete Documentation Installer for Windows (5 MB .exe file, revision 2)

Pro Tools FREE Complete Documentation Installer for Mac (9 MB .hqx file)

Individual Documents:

Pro Tools FREE Read Me (33k .pdf, revision 2)

Pro Tools FREE Quick Start Guide (507 k)

Pro Tools 5.0.1 Reference Guide (5.2 MB)

Installers do not include these files:

MIDI Controllers Guide (1 MB)

Japanese Pro Tools 5.0.1 Documents

German Pro Tools 5.0.1 Documents

Pro Tools 5.0.1

PT 5.0.1 What's New (460 k)

PT 5.0.1 Read Me (56 k)

PT 5.0.1 Reference Guide (5.2 MB)

5.0 TDM Hardware Install Guide (1.4 MB)

5.0.1 Expanded Systems Guide (824 k)

5.0.1 DigiRack Plug-Ins Guide (856 k)

5.0.1 Keyboard Shortcuts-Mac (176 k)

5.0.1 Keyboard Shortcuts-98/NT (167 k)

5.0 MIDI Controllers Guide (1 MB)

5.0.1 Digi 001 Quick Start Guide (1.3 MB)

5.0.1 Digi ToolBox XP Quick Start Guide (759 k)

Pro Tools AVoption

Except for the above, the following version 5.1 documents also apply to Pro Tools 5.1.1 and higher

Pro Tools 5.1

Pro Tools 5.1 What's New (259 k)

Pro Tools 5.1 Read Me (71 k)

Pro Tools 5.1 Reference Guide (7.3 MB)

- 5.1 TDM Installation Guide (1.7 MB)
- 5.1 Expanded Systems Guide (562 k)
- 5.1 DigiRack Plug-Ins Guide (905 k)
- 5.1 MIDI Control Surfaces Guide (1.6 MB)
- 5.1 Getting Started with Digi 001 (1.2 MB)
- 5.1 Getting Started with Digi ToolBox XP (674 k)
- 5.1 Keyboard Shortcuts for Macintosh (594 k)
- 5.1 Keyboard Shortcuts for Windows (588 k)

Pro Tools AVoption

Pro Tools 5.1 AVoption & AVoption XL Guide (962 k)
PT 5.1.3 with AVoption & AVoption XL Read Me (38 k)

1622 I/O

1622 I/O Interface Guide (233 k)

882/20 I/O

882/20 Manual (267 k)

888/24 I/O

888/24 Manual (730 k)

24-Bit ADAT Bridge I/O

24-Bit ADAT Bridge Manual (1.4MB)

AMIII

Audiomedia III Installation Guide (977 k)

Control 24

Control|24 Guide (5 MB)

Control|24 Welcome/Windows 2000 Install (32 k)

Control|24 Pinouts (link)

Control|24 Dimensions (link)

Focusrite

Focusrite Hardware User Guides (link)

Focusrite USA Model Fuses (21 k)

DigiDrive

DigiDrive FireWire Guide (403 k)

DigiDrive Ultra 160/LVD Guide (738 k)

DigiSnakes & Digi Cables

Digi Cable Matrix (18 k)

DigiSnake Cable Configurations (550 k)

AVoption & Avoption XL Guide (962 k)
AVOption & AVOption|XL Release Bulletin
(93 k, 7/12/00)

Japanese Pro Tools 5.0.1 Documents

German Pro Tools 5.0.1 Documents

Other Previous Documents

Pro Tools 5.0

PT 5.0 What's New (356 k)

PT 5.0 Quick Reference Card-Mac (150 k)

PT 5.0 Quick Reference Card-NT (150 k)

PT 5.0 TDM Hardware Install Guide (1.4 MB)

Pro Tools Mac v4

4.3.1 Addendum

4.3 Whats New

4.2 Whats New

Expansion Chassis Guide

MachineControl Addendum

USD Addendum

4.3 Quick Reference Card (2 Mb)

Pro Tools NT v4

MachineControl 1.0.1 NT

4.2.x Quick Reference Card (2 MB)

4.2.6 ReadMe

Pro Tools 3.4

Pro Tools 3.4 Software User Guide

Previous DigiDrive

DigiDrive Guide 9/18 GB v1.0.1 (828 k)

Previous ProControl

5.1 ProControl Addendum (1.9 MB)

5.0 ProControl User's Guide (5.7 MB)

Previous USD

USD 4.3 Addendum (161 k)

Universal Slave Driver 3.0 Manual (1.1 MB)

ADAT Bridge (pre-24-bit)

ADAT Bridge Manual (1.4 MB)

Translated Documents

(work in progress)

French

DirectConnect

DirectConnect 1.1 Manual (89 k)

MachineControl

MachineControl Guide (338 k, includes pinout correction below)

Remote Mode 9-Pin Cable Pinouts (41 k, Nov. 01) Machine Profiles List (75 k)

MasterList CD

MasterList CD Addendum Manual (206 k) MasterList CD Specification Grid (36 k)

MotorMix

MotorMix Owner's Manual (398 k)

ProControl

ProControl User's Guide (10.5 MB)

Edit Pack Guide (885 k)

ProControl Data Sheet (657 k)

Pro Control Dimensions - Centimeters (423 k)

Pro Control Dimensions - Inches (416 k)

Pinouts pre June 2000 (sn NX1800 & lower)

Pinouts post June 2000 (sn NX1801 & higher)

SampleCell II Hardware

SampleCell Editor 3.0 Addendum (159 k)

SampleCell Editor 3.1 Mac Notes (22 k)

SampleCell Editor 3.1 Addendum (179 k)

Soft SampleCell

What's New in Soft SampleCell 3.1 (120 k)

Soft SampleCell 3.1 Read Me (41 k)

Soft SampleCell 3.1 Notes (37 k)

Soft SampleCell Guide v3.0 (1.2 MB)

SCSI64 Kit

ATTO ExpressPCI Manual (120 k)

SSD

SSD Guide (144 k)

USD

USD User's Guide for PT 5.0.1 (1.2 MB)

USD Setup v5.0.2 Mac Release Notes (11 k)

USD Setup v5.0.1 Windows Release Notes (7 k)

Read Me Archives

Pro Tools ReadMe
Pro Tools Plug-Ins ReadMe
MasterList CD ReadMe
AMIII Win98 Driver v1.5 ReadMe
SampleCell Editor 3.1 Mac Notes

German

Italian

Spanish

Japanese Pro Tools 5.0.1 Documents

German Pro Tools 5.0.1 Documents

Additional Resources

Digidesgn Compatibility Documents

Digidesign Answerbase

The most up to date version of our technical database. Instant answers to questions.

Frequently Asked Questions (FAQ)

Now included in the searchable web Answerbase

Late Breaking Technical Issues (LBTI)

Now included in the searchable web Answerbase

Download Standalone Answerbase Translations

Older versions of the Answerbase, translated into French, German, Italian, Japanese, and Spanish.

Digidesign Technical Support Section

Digidesign Customer Service Section

Digidesign Downloads Section

Digidesign Products Section

Producing in the Home Studio with Pro Tools

Pro Tools LE tutorial book and CD, by David Franz Download Chapter 1 (289 k)

Apple Memory Guide, November 2000

Complete guide to RAM in all Apple Computers through Nov. 2000. Includes installation tips and pictures. (1.8 MB)

AppleSpec Database

AppleSpec is a service provided by Jeff Gordon, with up-to-date information on almost all Apple Products. Downloadable Filemaker Pro and Runtime (standalone) versions.

Digidesign Training and Education Site

Our new Digi web site dedicated to Pro Tools education.

SampleCell Editor 3.0 Mac ReadMe SampleCell Editor 2.1.1 Mac ReadMe SampleCell 2.1.3 PC ReadMe Waves 2.8.1 Release Notes

AudioVision

AV 4.1v10 Release Notes AV 4.1v9 Release Notes AV 4.1 Release Notes

OMF

OMF Tool 2.0 Guide 148 k DOCMaker file (requires a Mac) Avid Products Collaboration Guide (2 MB pdf)

OMS

OMS Guide (544 k)

OMS Studio Setup Tutorial (683 k)

OMS Names Read Me

OMS Name Manager (373 k)

DigiZine

Our new online educational magazine from Digidesign and Pro Tools Users. $\,$

Links We Like

Compiled by Digi Tech Support, including links to Pro Tools QuickTime Tutorials & QuickTips, Educational Resources & Recommended Reading.