

Digidesign Product Compatibility Documents

Pro Tools 5.0.1 Archive

Pro Tools | 24 MIX and MIXplus Digi 001

Mac OS Windows NT Mac OS Windows 98

Pro Tools | 24 Digi ToolBox XP

Mac OS Windows NT Mac OS Windows 98

Pro Tools III Pro Tools FREE

Mac OS Windows 98/Me

MasterList CD

Mac OS





These documents contain compatibility information for Pro Tools 5.0.1 only. For current Pro Tools 5.1 compatibility, see the <u>Digidesign Compatibility Documents</u>
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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 24-Bit ADAT Bridge I/O ADAT Bridge I/O

Digidesign Software Supplied with System

Pro Tools 5.0.1 DAE 5.0.1 & DigiSystem INIT 5.0.1 TDM Mixer Plug-In 1.8.1

Optional Digidesign Software

Optional Digidesign Hardware

AVoption | XL

AVoption

ProControl

SMPTE Slave Driver (Discontinued)

Video Slave Driver Universal Slave Driver

Supported Optional Expansion Chassis

Third-Party MIDI Controllers & Interfaces

Third-Party Video Capture Cards

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 or v8.6
- Total System RAM:
 Up to 32 tracks 128 MB minimum 32-64 tracks 192 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 832 x 624
- Opcode OMS v2.3.8 or higher (supplied)
- Apple QuickTime v4.0 or higher (supplied)
- ATTO ExpressPro-Tools v2.3.2 or higher (supplied)
- <u>Hard Drive Minimum Requirements</u>
- 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.

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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 adding MIX Farm card(s) to Pro Tools 24 systems, refer to Pro Tools 4 MIX System compatibility information.

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

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 directly to arrange this.

Optional Digidesign Software

Note: A qualified external diskette drive is required for most software installations when used with a Blue & White G3 or G4s. Exceptions are pointed out below.

Access Virus v1.0.1: Requires a Pro Tools 24 MIX or MIXplus system.

Bruno/Reso v1.1.1

DINR v3.3.1: HUM Removal-TDM is not supported on MIX Core and MIX Farm cards.

DigiTranslator v1.0: Requires 128 MB RAM. Does not require Digidesign Hardware.

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 v2.3

Maxim v1.2.1

MP3 Export Option v1.0: does not require a floppy drive

PostConform v2.0

SampleCell Editor v2.1.1 (w/ SampleCell II Plus)

SampleCell-TDM v1.1.1 (w/ TDM Module), does not require a floppy drive

Sound Designer II v2.8.3: Compatible with Pro Tools III systems/cards only - not Pro Tools 24 or

Pro Tools 24 MIX-based systems. Does not support the use of Sound Designer II Plug-Ins.

SoundReplacer v1.1.1



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.

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 5.0.1
- AVoption | XL Software (provided on separate CD)
- DigiTranslator 1.0

Required Hardware Components (not supplied)

- Pro Tools 24, Pro Tools 24 MIX or Pro Tools 24 MIXplus based system
- Universal Slave Driver (USD)
- For Audio Storage: ATTO ExpressPCI Dual Channel Ultra/WIDE SCSI HBA card (EPCI-DC).
 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-2 LVD SCSI HBA card (EPCI-UL2D).

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 is currently not supported on AVoption | XL, however it is in development at Digidesign. Please check back here periodically for updates.

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

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:

• 192 MB - It is recommended that 60 MB be allocated to Pro Tools and 50 MB to DAE.

Expansion Chassis

- For updated slot order information with the latest qualified configurations, <u>download this</u> <u>PDF</u>. Refer to the AVoption|XL Guide for precise installation instructions and the "Supported Optional Expansion Chassis" web pages for further compatibility information when used with <u>Pro Tools|24 MIX or Pro Tools|24</u>.
- Important Cooling Issue: If you install the AVoption XL PCI board (Meridien Digital Media Board) in either the Digidesign 13-slot or Magma chassis, you must install the additional cooling fan (Digidesign part number MC201) in the chassis.
- 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 a SBS (Bit3) chassis, you run the serious risk of damaging it.

Drive Compatibility

- Audio Drives: AVoption | XL can be configured with any audio drives qualified for use with Pro Tools in general. Refer to the <u>Pro Tools TDM Hard Drive Minimum Requirements</u> page for details.
- Video Drives: Avid rS drives, iS Pro drives, iS Plus drives or DigiDrives are fully qualified.
- Note: 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.

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 Digidesign Downloads

Maximum Performance Guidelines

Compatible Dual-Channel SCSI HBA card

Total System RAM: 192MB recommended, 256 MB preferred

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 <u>(available for download as a PDF here)</u> for the latest information



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.

Digidesign PCI Cards Supplied with System

- ABVB Card
- Janus Card

Digidesign Software Supplied with System

- Pro Tools 5.0.1
- AVoption Software (provided on separate CD)
- DigiTranslator 1.0

Required Hardware Components (not supplied)

- Pro Tools | 24, Pro Tools | 24 MIX or Pro Tools | 24 MIXplus 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 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.

Supported CPU Models, Speeds & Requirements

A detailed list of qualified CPUs and expansion chassis configurations, including slot orders: <u>Available here as a PDF</u>

- 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

• 192 MB - It is recommended that 60 MB be allocated to Pro Tools and 50 MB to DAE.

Expansion Chassis

For updated slot order information with the latest qualified configurations, <u>download this</u>
 <u>PDF</u>. Refer to the AVoption Guide for precise installation instructions and the "Supported

Optional Expansion Chassis" web pages for further compatibility information when used with Pro Tools/24 MIX or Pro Tools/24.

- Important Cooling Issue: If you install the AVoption PCI boards (ABVB and Janus) in either the Digidesign 13-slot or Magma chassis, you must install the additional cooling fan (Digidesign part number MC201) in the chassis.
- WARNING: If you install the AVoption boards (ABVB and Janus) in a 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.

Third Party Video Capture Cards: The Pinnacle miroMotion DC30 Plus QuickTime capture card (with firmware v1.1.2) 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.

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 Digidesign Downloads

Maximum Performance Guidelines

Compatible Dual-Channel SCSI HBA card

Total System RAM: 192MB recommended, 256 MB preferred

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



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.

Expansion Chassis Requirements - Pro Tools 24 MIX

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) model DD23
- SBS (Bit3) models 24-700-2-2, 240-2-2 & 240-2-201
- Magma model PCI-13R
- Magma 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) model DD22-1
- SBS (Bit3) model 2101-00-2 (must use IBM PCI 2.1 compliant Bridge chips, with host card that starts with 20-101)
- Magma model PCI-7-RX-300V or PCI-7-RX-400V must have serial number PD01910 or higher (or 4638-01A0-xxxx). Some chassis may be labeled as PXB7RM, these are supported with a serial number PD01910 or higher.

6-Slot

Magma model PCI-6R

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. 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 <u>AVoption Requirements</u>
- 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:

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 <u>download</u> the <u>Expanded Systems Guide PDF</u>. For updated slot order information with the latest Digidesign and Magma 13-slot chassis <u>download this PDF</u>.

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 MIX System Configuration Support for Power Macintosh

Computer	Internal Core System	Pro Tools Expansion Chassis 7- or 13-Slot	SBS (Bit3) 7- or 13-Slot	Magma 6-, 7- or 13-Slot Chassis
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 Exception: PCI-13R & PCI-6R 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 Exception: PCI-13R & PCI-6R 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	YES Exception: PCI-13R & PCI-6R are not supported

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

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.

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.



Third-Party MIDI Hardware

Third-Party MIDI Control Surfaces

CM Labs MotorMix: For further information about this product, please contact your Digidesign dealer or local Digidesign office and ask for the Digidesign Development Partner Catalog.

Mackie HUI Controller: For further information about this product, please contact your Digidesign dealer or local Digidesign office and ask for the Digidesign Development Partner Catalog.

JL Cooper CS-10 series (MIDI model): For further information about this product, please contact your Digidesign dealer or local Digidesign office and ask for the Digidesign Development Partner Catalog.

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.



Third-Party Video Capture Cards

The following third-party video capture cards have been qualified for use with Pro Tools 5.0 or higher on G4 Power Macintoshes

- Aurora Fuse (firmware v1.8.1)
- Pinnacle miroMotion DC30 Plus (firmware v1.1.2)



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

Apple G4 (AGP Graphics) Computers Supported:

Single Processor		Dual Processor	
350M	Hz PowerPC G4	Dual 450MHz PowerPC G4	
400M	Hz PowerPC G4	Dual 500MHz PowerPC G4	
450M	Hz PowerPC G4		
500M	Hz PowerPC G4		

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

1999 & 2000 Apple G4 version history:

http://www.everymac.com/systems/apple/powermac_g4/index.html

The following new 2001 G4 4 PCI slot models are currently not supported:

466MHz PowerPC G4 533MHz PowerPC G4 Dual 533MHz PowerPC G4

667MHz PowerPC G4 733MHz PowerPC G4

Additional Requirements:

Mac OS 8.6, 9.0, 9.0.2 or 9.0.4 required.

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

External Diskette Drive: Imation SuperDisk and NewerTechnology uDrive currently supported; although not required with Pro Tools installation, an external diskette drive may be required for some Plug-Ins installations.

- Imation SuperDisk drivers are available at www.imation.com
- NewerTechnology uDrive latest driver v1.0 is available at: http://www.newertech.com/software/drivers/index.html
- Pace USB floppy enabler v2.0 is available at: http://www.paceap.com/usb_enabler.html
- 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) only, with the following requirements:

- ATTO ExpressPCI Firmware v1.4.4 f1 ExpressPro-Tools v2.3.2 with bus Fallback Synch 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 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 and Griffin gPort II installed in the modem port (thereby not using a PCI slot).

When using the GeeThree products with OS 9.0.4 the latest version of the Stealth Port extension (v1.0.3) is required. It is 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

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://til.info.apple.com/techinfo.nsf/artnum/n58418

1999 & 2000 Apple G4 version history:

http://www.everymac.com/systems/apple/powermac_g4/index.html

Mac OS 9.0, 9.0.2, 9.0.4 or 8.6 required

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 Diskette Drive: Imation SuperDisk and NewerTechnology uDrive currently supported; although not required with Pro Tools installation, an external diskette drive may be required for some Plug-Ins installations.

- Imation SuperDisk drivers are available at www.imation.com
- NewerTechnology uDrive latest driver v1.0 is available at: http://www.newertech.com/software/drivers/index.html
- Pace USB floppy enabler v2.0 is available at: http://www.paceap.com/usb_enabler.html
- 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) only, with the following requirements:

- ATTO ExpressPCI Firmware v1.4.4 f1
- ExpressPro-Tools v2.3.2 with bus Fallback Synch 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 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 and Griffin gPort installed in the modem port (thereby not using a PCI slot).

When using the GeeThree products with OS 9.0.4 the latest version of the Stealth Port extension (v1.0.3) is required. It is 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, 9.0.2, 9.0.4 or 8.6 required

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 v5.0.1 CD-ROM)

External Diskette Drive: Imation SuperDisk and NewerTechnology uDrive currently supported; although not required with Pro Tools installation, an external diskette drive may be required for some Plug-Ins installations.

- Imation SuperDisk drivers are available at www.imation.com
- NewerTechnology uDrive latest driver v1.0 is available at: http://www.newertech.com/software/drivers/index.html
- Pace USB floppy enabler v2.0 is available at: http://www.paceap.com/usb_enabler.html
- 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) only, with the following requirements:

ATTO ExpressPCI Firmware v1.4.4 f1

ExpressPro-Tools v2.3.2 with bus Fallback Synch 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 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

Adaptec files mentioned above are available at:

http://www.adaptec.com/support/files/drivers.html#mac

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 and Griffin gPort installed in the modem port (thereby not using a PCI slot).

When using the GeeThree products with OS 9.0.4 the latest version of the Stealth Port extension (v1.0.3) is required. It is 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 Beige G3 - Pro Tools 24 Requirements

Beige G3 Processors of all speeds supported

Mac OS 9.0, 9.0.2, 9.0.4 or 8.6 required

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)

with the following requirements:

- ATTO ExpressPCI Firmware v1.4.4 f1
- ExpressPro-Tools v2.3.2 with bus Fallback Synch 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 available at: http://www.attotech.com/software

- 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

Adaptec files mentioned above are available at:

http://www.adaptec.com/support/files/drivers.html#mac

Radius VideoVision:

Radius VideoVision is incompatible with the optional video card included with some G3 Power Macintoshes. Please contact Radius for the latest information.

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, 9.0.2, 9.0.4 or 8.6 required

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)

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

with the following requirements:

- ATTO ExpressPCI Firmware v1.4.4 f1
- ExpressPro-Tools v2.3.2 with bus Fallback Synch 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 available at: http://www.attotech.com/software

- 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

Adaptec files mentioned above are available at: http://www.adaptec.com/support/files/drivers.html#mac

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

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

Power Macintosh	Mac OS 9.0	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)
- 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://til.info.apple.com/techinfo.nsf/artnum/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 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)

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. If using non-ATTO ExpressPro-Tools initialized drives, <u>click here for options</u>.

Windows NT file system: Fat 16, NTFS or HFS (with MacOpener v4.1). Drives should be formatted with Windows NT Disk Administrator.

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	
Western Digital	Enterprise	

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

To check supported SCSI HBA cards for your specific computer model, click here.

IDE/ATA Hard Drives

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

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.



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

32-64 track performance with Pro Tools | 24 MIX and MIXplus systems requires the following configuration:

Compatible SCSI HBA card

Total System RAM: 192MB minimum, 256 MB preferred

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.

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.



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 5.0.1 for Windows NT

Optional Digidesign Software

Optional Digidesign Hardware ProControl Universal Slave Driver Video Slave Driver SMPTE Slave Driver (Discontinued) via a MIDI interface only

Supported Optional Expansion Chassis

Third-Party MIDI Controllers & Interfaces

Supported CPU Speeds & Requirements IBM IntelliStation M Pro - model 6889

This Computer is qualified to provide up to 64 track performance and full Pro Tools functionality. Other IntelliStation M Pros are currently not qualified, including the M Pro model 6868, which has been problematic.

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 NT Workstation v4.0 SP5
- Total System RAM: 192 MB minimum for 32 tracks,
- 256 MB for 64 tracks
- Monitor, color required, minimum resolution of 1024 x 768
- Hard Drive Minimum Requirements

SCSI Host Adapter Required

- Adaptec 2940UW PCI card with BIOS 1.3x or higher*
- Adaptec 3940UW PCI card with BIOS 1.3x or higher*
- Integrated Adaptec AIC-78xx chip sets with BIOS 1.3x or higher
- *PCI card BIOS available on the Pro Tools CD-ROM

Maximum Performance Guidelines



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

MIX Farm: Maximum of 5 MIX Farm or MIX Core cards supported

DSP Farm: compatibility requires DSP Farms with serial number FG 10501 or higher with Pro Tools NT. There is no upgrade path for cards that begin with serial numbers "FF" or lower.

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: d24 card not available for separate purchase.

SampleCell II Plus

SampleCell II TDM Module

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

Access Virus v1.0.1: Requires a Pro Tools 24 MIX or MIXplus system.

Bruno/Reso v1.1.1

DINR v3.3.1: HUM Removal-TDM is not supported on Windows NT-based Pro Tools \mid 24 Systems

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

Maxim v1.2.1

MP3 Export Option v1.0

SampleCell Editor v2.1.3 (w/SampleCell II Plus)

SampleCell-TDM v1.3 (w/ TDM Module)

SoundReplacer v1.1.1



Expanded System Requirements - Pro Tools 24 for Windows NT

13-Slot

- SBS (Bit3) model DD23
- SBS (Bit3) models 24-700-2-2, 240-2-2 & 240-2-201

Note: 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 download the Expanded Systems Guide PDF.

Digidesign Card Requirements

MIX Core cards: CPU requires a SCSI boot drive and disabling of any active IDE drivers with Pro Tools 24 MIX systems playing back more than 32 tracks of audio.

DSP Farm cards: must have serial number FG 10501 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.



Third-Party MIDI Hardware

Third-Party MIDI Control Surfaces

CM Labs MotorMix: For further information about this product, please contact your Digidesign dealer or local Digidesign office and ask for the Digidesign Development Partner Catalog.

Mackie HUI Controller: For further information about this product, please contact your Digidesign dealer or local Digidesign office and ask for the Digidesign Development Partner Catalog.

JL Cooper CS-10 series (MIDI model): For further information about this product, please contact your Digidesign dealer or local Digidesign office and ask for the Digidesign Development Partner Catalog.

Peavey PC-1600

Third-Party MIDI Interfaces

MidiMan Winman 4x4/s

Opcode 64x: Although this MIDI Interface is supported please note that Opcode ships it with beta drivers.



IBM IntelliStation M Pro - Pro Tools Requirements

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

Note: Other IntelliStation M Pros are currently not qualified, 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 NT Workstation with Service Pack 5 required

Boot Drive

SCSI recommend for 32 tracks or higher

Display Cards:

Matrox Millennium G400 with 16MB RAM and Windows NT 4.0 driver Matrox Millennium G200 with 8MB RAM and Windows NT 4.0 driver Version 4.07

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.

Compatibility with video capture cards currently not qualified by Digidesign

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 III 450, 500, or 550 MHz.
- Intel Pentium II 233, 266, 300, 350, 400, or 450 MHz.Motherboard Guidelines: Intel 440LX or 440BX chipsets only
- 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 (Single-processor machines only)
- 2 adjactent PCI slots (required for Pro Tools Systems utilizing 2 PCI cards)

Suggested Motherboards:

- Intel SE440BX "Seattle" or Intel SE440BX-2 "Seattle 2" Recommended
- Dell Dimension XPS T: Dell Dimension must be configured with components listed on this Compatibility Document. Windows NT 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 (x levels) and PCI parity disabled

System RAM: 192 MB minimum for 32 tracks, 256 MB for 64 tracks

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

System Software: Windows NT Workstation v4.0 with Service Pack 5. Double-byte of character versions of NT are not supported i.e. Japanese NT, Chinese NT, Arabic NT etc.

Display card:

- Recommended: Matrox Millennium 2, Matrox Millennium G200, Matrox Millenium G400, Diamond Viper 550, Diamond Viper 330, ATI Rage Pro, ATI Xpert or nVidea TNT based cards
- Minimum: AGP card by ATI, Matrox, STB, nVidea, or Diamond

• Dual port video cards are currently not supported

System Audio: Multimedia Sound Cards must be deactivated

Storage: Qualified SCSI disk drive(s) (refer to "Pro Tools Qualified Drives" Document) with Fat 16 or NTFS file system

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

SCSI Host Adapter:

- Adaptec 2940UW PCI card with BIOS 1.3x or higher*
- Adaptec 3940UW PCI card with BIOS 1.3x or higher*
- *PCI card BIOS available on the Pro Tools CD-ROM

Known Issues - Computers & Components 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
- Motherboard: ASUS Currently not supported (does not provide required power to PCI slots)

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.



Windows NT Workstation v4.0 with Service Pack 5

To ensure correct operation the supplied Install-O-Rator CD-ROM will walk you through the required OS and BIOS settings.

Additional OS Notes:

- Double-byte character versions of NT are not supported ie. Japanese NT, Chinese NT, Arabic NT etc.
- Service Pack 4 or 5 may be required for Y2K compliance. Please contact Microsoft Corporation for further information.

Maximum Performance Guidelines for Pro Tools 24 MIX and MIXplus Systems On Windows NT

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

IBM IntelliStation M Pro - Model 6889 (Note: Other IntelliStation M Pros are currently not qualified, including the M Pro model 6868, which has been problematic.)

Total System RAM: 192 MB minimum for 32 tracks, 256 MB for 64 tracks

Two Pro Tools-qualified hard drives connected to a qualified Host Adapter

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

- Use of a combination of 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
- * Systems adhering to the Minimum Computer Requirements are currently qualified for 32 track performance. While they may be able to provide 32-64 track performance, they cannot be guaranteed to do so at this time.



Digidesign Hardware Supplied with System

Digi 001 PCI Card Digi 001 I/O Box Digi 001 Cable

Digidesign Software Supplied with System

Pro Tools 5.0.1 LE

Third-Party MIDI Controllers & Interfaces

Third-Party Video Capture Cards

Optional Digidesign Software

Optional Digidesign Hardware SampleCell II Plus

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 9600 (200 MHz or higher)

Caution, Known Performance Issues: Power Macintosh Beige G3

Additional Computer Requirements

- System Software: Mac OS v9.0 & v8.6
- 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
- Monitor, color required, minimum resolution of 832 x 624
- Opcode OMS v2.3.8 or higher (supplied)
- Apple QuickTime v4.0 or higher (supplied)
- <u>Storage</u>: <u>Qualified ATA/IDE or SCSI</u> <u>disk drive(s)</u>

*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 this system.

Digidesign 3401-A Hillview Avenue Palo Alto, CA 94304 U.S.A Tel 650.842.7900 Fax 650.842.7999 Product Information United States & Canada 1.800.333.2137 North & South America 650.842.6602 (USA) Europe (England) 44.1753.658496 Asia (Japan) 81.3.3505.7963



Optional Digidesign Software - Pro Tools LE Mac

Note: A qualified external diskette drive is required for most software installations when used with a Blue & White G3 or G4s. Exceptions are pointed out below.

DigiTranslator v1.0: Requires 128 MB RAM. Does not require Digidesign Hardware.

DINR v3.3.1: (AudioSuite)

D-Fi v1.4.1 (RTAS and AudioSuite)

D-fx v1.2.1 (AudioSuite)

D-Verb v1.7.1 (RTAS and AudioSuite)

Focusrite d3 v1.3.1 (AudioSuite)

Maxim v1.2.1 (RTAS and AudioSuite)

MasterList CD v2.3

MP3 Export Option v1.0: does not require a floppy drive

SampleCell Editor v2.1.1 (w/SampleCell II Plus), does not require a floppy drive

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 v1.1.1 (AudioSuite)



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.



Power Macintosh G4 (AGP Graphics) - Digi 001 Requirements

Apple G4 (AGP Graphics) Computers Supported:

Single Processor	Dual Processor
350MHz PowerPC G4	Dual 450MHz PowerPC G4
400MHz PowerPC G4	Dual 500MHz PowerPC G4
450MHz PowerPC G4	
500MHz PowerPC G4	

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

1999 & 2000 Apple G4 version history:

http://www.everymac.com/systems/apple/powermac_g4/index.html

The following new 2001 G4 4 PCI slot models are currently not supported:

466MHz PowerPC G4 533MHz PowerPC G4 Dual 533MHz PowerPC G4

667MHz PowerPC G4 733MHz PowerPC G4

Additional Requirements:

Mac OS 8.6, 9.0, 9.0.2 or 9.0.4 required.

External Diskette Drive: Imation SuperDisk and NewerTechnology uDrive currently supported; although not required with Pro Tools installation, an external diskette drive may be required for some Plug-Ins installations.

- Imation SuperDisk drivers are available at www.imation.com
- NewerTechnology uDrive latest driver v1.0 is available at: http://www.newertech.com/software/drivers/index.html
- Pace USB floppy enabler v2.0 is available at: http://www.paceap.com/usb_enabler.html
- 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 <u>Audio Storage Requirements</u> 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) only, 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 with bus Fallback Synch Rate set to 20 (10) and PCI Burst Rate set to 32 bytes, 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/support/files/drivers.html#mac

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 and Griffin gPort II installed in the modem port (thereby not using a PCI slot).

When using the GeeThree products with OS 9.0.4 the latest version of the Stealth Port extension (v1.0.3) is required. It is 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

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.

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://til.info.apple.com/techinfo.nsf/artnum/n58418

1999 & 2000 Apple G4 version history:

http://www.everymac.com/systems/apple/powermac_g4/index.html

Mac OS 9.0, 9.0.2, 9.0.4 or 8.6 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 and Griffin gPort installed in the modem port (thereby not using a PCI slot).

When using the GeeThree products with OS 9.0.4 the latest version of the Stealth Port extension (v1.0.3) is required. It is 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 Diskette Drive: Imation SuperDisk and NewerTechnology uDrive currently supported; although not required with Pro Tools installation, an external diskette drive may be required for some Plug-Ins installations.

- Imation SuperDisk drivers are available at www.imation.com
- NewerTechnology uDrive latest driver v1.0 is available at: http://www.newertech.com/software/drivers/index.html
- Pace USB floppy enabler v2.0 is available at: http://www.paceap.com/usb_enabler.html
- 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 <u>Audio Storage Requirements</u> 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 cards EPCI-DC (ExpressPCI Dual Channel Ultra/WIDE HBA) only, 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 with bus Fallback Synch 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 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/support/files/drivers.html#mac

Power Macintosh Blue & White G3 - Digi 001 Requirements

Blue & White G3 Processors of all speeds supported

Mac OS 9.0, 9.0.2, 9.0.4 or 8.6 required

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 and Griffin gPort installed in the modem port (thereby not using a PCI slot). When using the GeeThree products with OS 9.0.4 the latest version of the Stealth Port extension (v1.0.3) is required. It is available here: http://www.geethree.com/download.html

External Diskette Drive: Imation SuperDisk and NewerTechnology uDrive currently supported; although not required with Pro Tools installation, an external diskette drive may be required for some Plug-Ins installations.

- Imation SuperDisk drivers are available at www.imation.com
- NewerTechnology uDrive latest driver v1.0 is available at: http://www.newertech.com/software/drivers/index.html
- Pace USB floppy enabler v2.0 is available at: http://www.paceap.com/usb_enabler.html
- 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 <u>Audio Storage Requirements</u> 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) only, with the following requirements:

- ATTO ExpressPCI Firmware v1.4.4 f1
- ExpressPro-Tools v2.3.2 with bus Fallback Synch 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 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
- Adaptec files are available at: http://www.adaptec.com/support/files/drivers.html#mac

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. If after reading this notice you still wish to use a beige G3 with Digi 001, here's what results we have found with our internal and external beta testing:

- Best Case: all day, all night no errors
- Typical: 2 or 3 errors in an eight hour day
- Worst Case: 6 or 8 errors in an eight hour day

Other Digi 001 Beige G3 Requirements

- Mac OS 9.0, 9.0.2, 9.0.4 or 8.6 required
- **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)

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 with bus Fallback Synch Rate set to 20 (10) and PCI Burst Rate set to 32 bytes, 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
- Adaptec files mentioned above are available at: http://www.adaptec.com/support/files/drivers.html#mac



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.

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
- 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
- HFS or HFS+ file system. Drives should be initialized with ATTO ExpressPro Tools v2.3.2. 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.



Digidesign Hardware Supplied with System Digi 001 PCI Card Digi 001 I/O Box Digi 001 Cable

Digidesign Software Supplied with System Pro Tools 5.0.1 LE

Third-Party MIDI Controllers & Interfaces

Optional Digidesign Software

Optional Digidesign Hardware SampleCell II Plus

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 Processor

Additional Computer Requirements

- System Software: Windows 98, Second Edition
- Total System RAM: 128 MB minimum 192 MB recommended (Additional RAM required for simultaneous use with MIDI sequencers. Virtual memory is not supported)
- Intel chipset and ATX motherboard
- Phoenix or Award BIOS (recommended)
- CD-ROM drive for software install
- AGP or PCI graphic card
- Monitor, color required, minimum resolution of 800 x 600
- One available PCI Slot
- Storage: 4GB hard drive space dedicated for audio (minimum). For maximum performance a dedicated qualified ATA/IDE or SCSI disk drive(s) is required.

Optional Third-Party SCSI HBA Card Adaptec AVA-2906 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 - Pro Tools LE does NOT support the following systems or systems with the following components:

- Hewlett Packard Pavillion line of computers
- AMD K6, K6-2 or K6-III 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 98 User Configurations section of the Digidesign User Conference for computer recommendations from Pro Tools LE users like you. 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.

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Optional Digidesign Software - Pro Tools LE for Windows

DINR v3.3.1: (AudioSuite)
D-Fi v1.4.1 (RTAS and AudioSuite)
D-fx v1.2.1 (AudioSuite)
D-Verb v1.7.1 (RTAS and AudioSuite)
Focusrite d3 v1.3.1 (AudioSuite)
Maxim v1.2.1 (RTAS and AudioSuite)
MP3 Export Option v1.0
SampleCell Editor v2.1.3 (w/SampleCell II Plus)
SoundReplacer v1.1.1 (AudioSuite)



Windows 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.

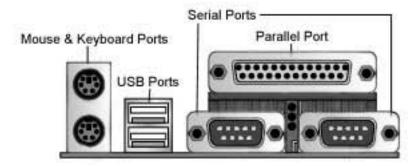
Additional Notes:

- While Windows 98 First Edition may run Pro Tools LE, only Second Edition has been tested and is fully supported by Digidesign.
- Double-byte character version of Windows 98 is currently not supported (i.e. Japanese, Chinese, Korean, Arabic)

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.



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

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
- 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.

VIA Chipset Incompatibility

The VIA chipsets handle IRQ routing and the PCI bus in a way that does not work well with bus master cards. Because Digi 001 is a bus master card we can not support motherboards based on the VIA driver - this incompatibility is consistent with other digital audio cards that are bus masters. To check what kind of bus master driver you have follow these steps:

- 1. Right-click the "My Computer" Icon and select "Properties" from the drop-down menu
- 2. Select the "Device Manager" tab
- 3. Select "Hard Disk Controllers"
- 4. The Bus Mastering driver will be listed here
- 5. Close "Device Manager"



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 5.0.1
- DAE 5.0.1 & DigiSystem INIT 5.0.1
- TDM Mixer Plug-In 1.8.1

Optional Digidesign Software

Optional Digidesign Hardware

- AVoption XL
- AVoption
- Pro Tools | 24 Expansion Kit <u>(see this link for details)</u>
- ProControl
- SMPTE Slave Driver (Discontinued)
- Video Slave Driver
- Universal Slave Driver

Supported Optional Expansion Chassis

Third-Party MIDI Controllers & Interfaces

Third-Party Video Capture Cards

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 or v8.6

Total System RAM:

- Up to 32 tracks 128 MB minimum
- 32 64 tracks 192 MB minimum (systems upgraded with a MIX Farm)
- 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 832×624

Opcode OMS v2.3.8 or higher (supplied)

Apple QuickTime v4.0 or higher (supplied)

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

Hard Drive Minimum Requirements

SCSI HBA Card Required

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.

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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 adding MIX Farm card(s) to Pro Tools 24 systems, you must refer to the Pro Tools 4 MIX System compatibility information.

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.

SampleCell II Plus

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 directly to arrange this.

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Expansion Chassis Requirements - Pro Tools 24

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) model DD23
- SBS (Bit3) models 24-700-2-2, 240-2-2 & 240-2-201
- Magma model PCI-13R
- Magma 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) model DD22-1
- SBS (Bit3) model 2101-00-2 (must use IBM PCI 2.1 compliant Bridge chips, with host card that starts with 20-101)
- Magma model PCI-7-RX-300V or PCI-7-RX-400V must have serial number PD01910 or higher (or 4638-01A0-xxxx). Some chassis may be labeled as PXB7RM, these are supported with a serial number PD01910 or higher.

6-Slot

• Magma model PCI-6R

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 <u>download the Expanded</u> <u>Systems Guide PDF.</u> For updated slot order information with the latest Digidesign and Magma 13-slot chassis <u>download this PDF.</u>

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	Core System Up to 32 tracks	Expansion Chassis 7- or 13-Slot Up to 32 tracks + more slots for DSP Farms, SampleCell IIs	7- or 13-Slot Up to 32 tracks + more slots for DSP Farm, SampleCell IIs	6-, 7- or 13-Slot Chassis	Pro Tools 24 Exp. Kit Up to 64 tracks	Expansion Chassis 7- or 13-Slot Up to 64 tracks + more slots for DSP Farms, SampleCell IIs	7- or 13-Slot UP to 64 tracks + more slots for DSP Farm, SampleCell IIs	SampleCell IIs
G4 with AGP Graphics	YES	YES	13-Slot Only	YES	NO	YES	13-Slot Only	YES
G4 with PCI Graphics	YES	YES	YES	YES	YES Requires supported Chassis	YES	YES note: 7-Slot Chassis require PCI 2.1 Compliant Bridge Chips	YES
Blue & White G3	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	I .	YES Exception: DD007-R are not supported	YES Exception: PCI-13R & PCI-6R are not supported	YES Requires supported Chassis		YES Exception: DD007-R are not supported note: 7-Slot Chassis require PCI 2.1 Compliant Bridge Chips	YES Exception: PCI-13R & PCI-6R 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	No Exception: 13-Slot chassis with S/N lower than NB0600100C are supported.	13-Slot Only	YES Exception: PCI-13R & PCI-6R not supported
9500	YES		YES Exception: DD007-R are not supported	YES Exception: PCI-13R & PCI-6R are not supported	150 MHz or Higher	NO	NO	NO

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

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.

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.

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.



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 5.0.1 for Windows NT

Optional Digidesign Software

Optional Digidesign Hardware ProControl Universal Slave Driver Video Slave Driver SMPTE Slave Driver (Discontinued) via a MIDI interface only

Supported Optional Expansion Chassis

Third-Party MIDI Controllers & Interfaces

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 currently not qualified, including the M Pro model 6868, which has been problematic.

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 NT Workstation v4.0 SP5
- Total System RAM: 192 MB minimum,
- 256 MB recommended
- Monitor, color required, minimum resolution of 1024 x 768
- Hard Drive Minimum Requirements

SCSI Host Adapter Required

- Adaptec 2940UW PCI card with BIOS 1.3x or higher*
- Adaptec 3940UW PCI card with BIOS 1.3x or higher*
- Integrated Adaptec AIC-78xx chip sets with BIOS 1.3x or higher
- *PCI card BIOS available on the Pro Tools CD-ROM

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

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Other Digidesign PCI Card Options - Pro Tools | 24 for Windows NT MIX Farm: Maximum of 5 MIX Farm or MIX Core cards supported

DSP Farm: compatibility requires DSP Farms with serial number FG 10501 or higher with Pro Tools NT. There is no upgrade path for cards that begin with serial numbers "FF" or lower.

SampleCell II Plus

SampleCell II TDM Module



Digidesign Hardware Supplied with System Audiomedia III Card

Digidesign Software Supplied with System Pro Tools 5.0.1 LE

Third-Party MIDI Controllers & Interfaces

Third-Party Video Capture Cards

Optional Digidesign Software

Optional Digidesign Hardware SampleCell II Plus 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 & v8.6
- 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
- Monitor, color required, minimum resolution of 832 x 624
- Opcode OMS v2.3.8 or higher (supplied)
- Apple QuickTime v4.0 or higher (supplied)
- Storage: Qualified ATA/IDE or SCSI disk drive(s)

*Note: Digi ToolBox XP 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.

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Audiomedia III Card for the Mac OS

Known Incompatibility with older Audiomedia III 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. This chip rev'd to QC on the Audiomedia III to allow for compatibility with PCs that did not allow you to disable PCI Burst Mode (it rev'd 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 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 directly to arrange this.



Power Macintosh G4 (AGP Graphics) - Digi ToolBox XP Requirements

Apple G4 (AGP Graphics) Computers Supported:

Si	ngle Processor	Dual Processor
35	60MHz PowerPC G4	Dual 450MHz PowerPC G4
40	OOMHz PowerPC G4	Dual 500MHz PowerPC G4
45	50MHz PowerPC G4	
50	OOMHz PowerPC G4	

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

1999 & 2000 Apple G4 version history:

http://www.everymac.com/systems/apple/powermac_g4/index.html

The following new 2001 G4 4 PCI slot models are currently not supported:

466MHz PowerPC G4 533MHz PowerPC G4 Dual 533MHz PowerPC G4

667MHz PowerPC G4 733MHz PowerPC G4

Additional Requirements:

Mac OS 8.6, 9.0, 9.0.2 or 9.0.4 required.

External Diskette Drive: Imation SuperDisk and NewerTechnology uDrive currently supported; although not required with Pro Tools installation, an external diskette drive may be required for some Plug-Ins installations.

- Imation SuperDisk drivers are available at www.imation.com
- NewerTechnology uDrive latest driver v1.0 is available at: http://www.newertech.com/software/drivers/index.html
- Pace USB floppy enabler v2.0 is available at: http://www.paceap.com/usb_enabler.html
- 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 <u>Audio Storage Requirements</u> 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) only, 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 with bus Fallback Synch Rate set to 20 (10) and PCI Burst Rate set to 32 bytes, 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/support/files/drivers.html#mac

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 and Griffin gPort II installed in the modem port (thereby not using a PCI slot).

When using the GeeThree products with OS 9.0.4 the latest version of the Stealth Port extension (v1.0.3) is required. It is 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

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.

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://til.info.apple.com/techinfo.nsf/artnum/n58418

1999 & 2000 Apple G4 version history:

http://www.everymac.com/systems/apple/powermac_g4/index.html

Mac OS 9.0, 9.0.2, 9.0.4 or 8.6 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 and Griffin gPort installed in the modem port (thereby not using a PCI slot).

When using the GeeThree products with OS 9.0.4 the latest version of the Stealth Port extension (v1.0.3) is required. It is available here: http://www.geethree.com/download.html

External Diskette Drive: Imation SuperDisk and NewerTechnology uDrive currently supported; although not required with Pro Tools installation, an external diskette drive may be required for some Plug-Ins installations.

- Imation SuperDisk drivers are available at www.imation.com
- NewerTechnology uDrive latest driver v1.0 is available at: http://www.newertech.com/software/drivers/index.html
- Pace USB floppy enabler v2.0 is available at: http://www.paceap.com/usb_enabler.html
- 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 <u>Audio Storage Requirements</u> 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) only, with the following requirements:

- ATTO ExpressPCI Firmware v1.4.4 f1
- ExpressPro-Tools v2.3.2 with bus Fallback Synch 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 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 mentioned above are available at: http://www.adaptec.com/support/files/drivers.html#mac

Power Macintosh Blue & White G3 - Digi ToolBox XP Requirements

Blue & White G3 Processors of all speeds supported

Mac OS 9.0, 9.0.2, 9.0.4 or 8.6 required

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 and Griffin gPort installed in the modem port (thereby not using a PCI slot).

When using the GeeThree products with OS 9.0.4 the latest version of the Stealth Port extension (v1.0.3) is required. It is available here: http://www.geethree.com/download.html

External Diskette Drive: Imation SuperDisk and NewerTechnology uDrive currently supported; although not required with Pro Tools installation, an external diskette drive may be required for some Plug-Ins installations.

- Imation SuperDisk drivers are available at www.imation.com
- NewerTechnology uDrive latest driver v1.0 is available at: http://www.newertech.com/software/drivers/index.html
- Pace USB floppy enabler v2.0 is available at: http://www.paceap.com/usb_enabler.html
- 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 <u>Audio Storage Requirements</u> 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:

 $ATTO\ ExpressPCI\ SCSI\ HBA\ card\ EPCI-DC\ (ExpressPCI\ Dual\ Channel\ Ultra/WIDE\ HBA)\ only,\ with\ the\ following\ requirements:$

- ATTO ExpressPCI Firmware v1.4.4 f1
- ExpressPro-Tools v2.3.2 with bus Fallback Synch 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 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

Adaptec files mentioned above are available at:

http://www.adaptec.com/support/files/drivers.html#mac



Power Macintosh Beige G3 - Digi ToolBox XP Requirements

Beige G3 Processors of all speeds supported

Mac OS 9.0, 9.0.2, 9.0.4 or 8.6 required

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)

with the following requirements:

- ATTO ExpressPCI Firmware v1.4.4 f1
- ExpressPro-Tools v2.3.2 with bus Fallback Synch 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 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

Adaptec files mentioned above are available at: http://www.adaptec.com/support/files/drivers.html#mac



Digidesign Hardware Supplied with System Audiomedia III Card

Digidesign Software Supplied with System Pro Tools 5.0.1 LE

Third-Party MIDI Controllers & Interfaces

Optional Digidesign Software

Optional Digidesign Hardware SampleCell II Plus

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 Processor

Additional Computer Requirements

- System Software: Windows 98, Second Edition
- 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 install
- AGP or PCI graphic card
- Monitor, color required, minimum resolution of 800 x 600
- One available PCI Slot
- Storage: 4GB hard drive space dedicated for audio (minimum). For maximum performance a dedicated qualified ATA/IDE or SCSI disk drive(s) is required.

Optional Third-Party SCSI HBA Card Adaptec AVA-2906 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 - Pro Tools LE does NOT support the following systems or systems with the following components:

- Hewlett Packard Pavillion line of computers
- AMD K6, K6-2 or K6-III 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 98 User Configurations section of the Digidesign User Conference for computer recommendations from Pro Tools LE users like you. 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.

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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
- 24-Bit ADAT Bridge I/O
- ADAT Bridge I/O
- ADAT Interface*
- * Digidesign ADAT Interface not supported with Pro Tools III systems that use 888|24 I/O or 882|20 I/O.

Digidesign Software Supplied with System

• Pro Tools 5.0.1

Supported Optional Expansion Chassis

Third-Party MIDI Controllers & Interfaces

Third-Party Video Capture Cards <u>Aurora Fuse</u> (firmware v1.8.1) Pinnacle miroMotion DC30 Plus (firmware v1.1.2) 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 with 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 832 x 624
- Opcode OMS v2.3.8 or higher (supplied)
- Apple QuickTime v4.0 or higher (supplied)
- Hard Drive Minimum Requirements

Optional Digidesign Software

Optional Digidesign Hardware ProControl SMPTE Slave Driver (Discontinued) Video Slave Driver Universal Slave Driver

*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.

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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 directly to arrange this.



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 Expanded Systems Guide PDF. 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

Apple G4 (AGP Graphics) Computers Supported:

Single Processor	Dual Processor		
350MHz PowerPC G4	Dual 450MHz PowerPC G4		
400MHz PowerPC G4	Dual 500MHz PowerPC G4		
450MHz PowerPC G4			
500MHz PowerPC G4			

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

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

Note: The following new models are currently not supported with Pro Tools III:

466MHz PowerPC G4 533MHz PowerPC G4 Dual 533MHz PowerPC G4

667MHz PowerPC G4 733MHz PowerPC G4

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

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 CD-ROM)

External Diskette Drive: Imation SuperDisk and NewerTechnology uDrive currently supported; although not required with Pro Tools installation, an external diskette drive may be required for some Plug-Ins installations.

- Imation SuperDisk driver version 3.2 is available from our Downloads/Utilities Section
- Current Imation SuperDisk drivers are available at www.imation.com
- NewerTechnology uDrive latest driver v1.0 is available at: http://www.newertech.com/software/drivers/index.html
- Pace USB floppy enabler v2.0 is available at: http://www.paceap.com/usb_enabler.html
- 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 and Griffin gPort II installed in the modem port (thereby not using a PCI slot).

When using the GeeThree products with OS 9.0.4 the latest version of the Stealth Port extension (v1.0.3) is required. It is 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

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://til.info.apple.com/techinfo.nsf/artnum/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 v5.1 CD-ROM)

External Diskette Drive: Imation SuperDisk and NewerTechnology uDrive currently supported; although not required with Pro Tools installation, an external diskette drive may be required for some Plug-Ins installations.

- Imation SuperDisk driver version 3.2 is available from our Downloads/Utilities Section
- Current Imation SuperDisk drivers are available at www.imation.com
- NewerTechnology uDrive latest driver v1.0 is available at: http://www.newertech.com/software/drivers/index.html
- Pace USB floppy enabler v2.0 is available at: http://www.paceap.com/usb_enabler.html
- 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 and Griffin gPort installed in the modem port (thereby not using a PCI slot).

When using the GeeThree products with OS 9.0.4 the latest version of the Stealth Port extension (v1.0.3) is required. It is 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

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 Diskette Drive: Imation SuperDisk and NewerTechnology uDrive currently supported; although not required with Pro Tools installation, an external diskette drive may be required for some Plug-Ins installations.

- Imation SuperDisk driver version 3.2 is available from our Downloads/Utilities Section
- Current Imation SuperDisk drivers are available at www.imation.com
- NewerTechnology uDrive latest driver v1.0 is available at: http://www.newertech.com/software/drivers/index.html
- Pace USB floppy enabler v2.0 is available at: http://www.paceap.com/usb_enabler.html
- 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 and Griffin gPort installed in the modem port (thereby not using a PCI slot).

When using the GeeThree products with OS 9.0.4 the latest version of the Stealth Port extension (v1.0.3) is required. It is 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

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

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.



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 Version Pro 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

Not yet tested:

Powerbook G4 (Titanium)

Additional Computer Requirements

- System Software: Mac OS v9.0 & v8.6
- 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, color required, minimum resolution of 832 x 624
- 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), <u>such as those qualified</u> <u>with Pro Tools LE</u>, should be used.

<u>Third-Party MIDI Controllers &</u> Interfaces

Optional Digidesign Software

Optional Digidesign Hardware

SampleCell II Plus - requires PCI slot

Digidesign 3401-A Hillview Avenue Palo Alto, CA 94304 U.S.A Tel 650.842.7900 Fax 650.842.7999

Product Information United States & Canada 1.800.333.2137 North & South America 650.842.6602 (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.

1999 & 2000 Apple G4 version history:

http://www.everymac.com/systems/apple/powermac_g4/index.html

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		

*Note: Pro Tools FREE will experienced a drop in performance when the USB speakers provided with the G4 Cube are plugged in.

Testing has not been completed with G4 models announced in January 2001. The following new models have not yet been fully tested for compatibility with Pro Tools FREE:

466MHz PowerPC G4 533MHz PowerPC G4 Dual 533MHz PowerPC G4

667MHz PowerPC G4 733MHz PowerPC G4

Optional Compatibility Information

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 recommends the GeeThree Stealth Port installed in the modem port for use with Pro Tools FREE. The Griffin gPort II is also expected to be compatible.

When using the GeeThree products with Mac OS 9.0.4 the latest version of the Stealth Port extension (v1.0.3) is required. It is available here: $\frac{\text{http://www.geethree.com/download.html}}{\text{http://www.geethree.com/download.html}}$

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.

External Diskette Drive

Imation SuperDisk and NewerTechnology uDrive are compatible; although not required with Pro Tools FREE installation, an external diskette drive may be required for some Plug-Ins installations.

Imation SuperDisk drivers are available at: www.imation.com

NewerTechnology uDrive latest driver v1.0 is available at: http://www.newertech.com/software/drivers/index.html

Pace USB floppy enabler v2.0 is available at: http://www.paceap.com/usb_enabler.html

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 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

Adaptec files mentioned above are available at: http://www.adaptec.com/support/files/drivers.html#mac

– OR –

ATTO ExpressPCI SCSI HBA card EPCI-DC (ExpressPCI Dual Channel Ultra/WIDE HBA) only, with the following requirements:

ATTO ExpressPCI Firmware v1.4.4 f1

ExpressPro-Tools v2.3.2 with bus Fallback Synch 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 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.

PowerBook G3 - Pro Tools FREE Compatibility

The following PowerBook G3s are compatible

- PowerBook G3 Pismo
- PowerBook G3 Wallstreet

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 SCSI drive which follow the Pro Tools LE Audio Storage Requirements as close as possible is recommended.

Optional Compatibility Information

External Diskette Drive

Imation SuperDisk and NewerTechnology uDrive are compatible. Although not required with Pro Tools FREE installation, an external diskette drive may be required for some Plug-Ins installations.

Imation SuperDisk drivers are available at: www.imation.com

NewerTechnology uDrive latest driver v1.0 is available at: http://www.newertech.com/software/drivers/index.html

Pace USB floppy enabler v2.0 is available at: http://www.paceap.com/usb_enabler.html

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

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. Digidesign currently recommends the GeeThree Stealth Port installed in the modem port for use with Pro Tools FREE. The Griffin gPort II is also expected to be compatible.

When using the GeeThree products with Mac OS 9.0.4 the latest version of the Stealth Port extension (v1.0.3) is required. It is available here: http://www.geethree.com/download.html

External Diskette Drive

Imation SuperDisk and NewerTechnology uDrive are compatible. Although not required with Pro Tools FREE installation, an external diskette drive may be required for some Plug-Ins installations.

- Imation SuperDisk driver version 3.2 is available from our Downloads/Utilities Section
- Current Imation SuperDisk drivers are available at www.imation.com
- NewerTechnology uDrive latest driver v1.0 is available at: http://www.newertech.com/software/drivers/index.html
- Pace USB floppy enabler v2.0 is available at: http://www.paceap.com/usb_enabler.html
- 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
- Adaptec files mentioned above are available at: http://www.adaptec.com/support/files/drivers.html#mac

- OR -

ATTO ExpressPCI SCSI HBA card EPCI-DC (ExpressPCI Dual Channel Ultra/WIDE HBA) only, with the following requirements:

- ATTO ExpressPCI Firmware v1.4.4 f1
- ExpressPro-Tools v2.3.2 with bus Fallback Synch 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	3.2 is avail	able at:]	http://www.	attotech.co	m/software/	



iMac - Pro Tools FREE Optional Compatibility Information

External Diskette Drive

Imation SuperDisk and NewerTechnology uDrive are compatible; although not required with Pro Tools FREE installation, an external diskette drive may be required for some Plug-Ins installations.

Imation SuperDisk drivers are available at: www.imation.com

NewerTechnology uDrive latest driver v1.0 is available at: http://www.newertech.com/software/drivers/index.html

Pace USB floppy enabler v2.0 is available at: http://www.paceap.com/usb_enabler.html

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 MotorMix: For further information about this product, please contact your Digidesign dealer or local Digidesign office and ask for the Digidesign Development Partner Catalog.

Note: Profiles for MotorMix and other MIDI control surfaces that are <u>supported with Pro Tools LE</u> are included in the CD-ROM version of Pro Tools FREE. While these other control surfaces may work with Pro Tools FREE, only MotorMix 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.



Optional Digidesign Software - Pro Tools FREE

Note: A qualified external diskette drive is required for most software installations when used with a Blue & White G3 or G4s. Exceptions are pointed out below.

DigiTranslator v1.0: Mac OS only. Requires 128 MB RAM. Does not require Digidesign Hardware.

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

D-Verb v1.7.1 (RTAS and AudioSuite)

Focusrite d3 v1.3.1 (AudioSuite)

Maxim v1.2.1 (RTAS and AudioSuite)

MasterList CD v2.3: Mac OS only

MP3 Export Option v1.0: does not require a floppy drive

SampleCell Editor v2.1.X (w/SampleCell II Plus), does not require a floppy drive

SoundReplacer v1.1.1 (AudioSuite)

Note: Most RTAS and/or AudioSuite Plug-Ins from Digidesign's Development Partners are compatible with Pro Tools FREE. 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 Version Pro 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 <u>laptop</u>, single processor, 300 MHz or faster
- Intel Celeron, 300 MHz or faster
- AMD Athlon

Known Incompatibilities Caution - Pro Tools FREE has been 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 processor based computers
- Original Pentium processor based computers (Pentium I)
- VIA chipset based motherboard computers
- "ESS Solo-1 PCI AudioDrive" Sound,

Additional Computer Requirements

- System Software: Windows Me or Windows 98, Second Edition
- Total System RAM: 128 MB minimum 192 MB recommended (Additional RAM required for simultaneous use with MIDI sequencers.)
- Intel chipset
- <u>Phoenix or Award BIOS</u> (recommended)
- CD-ROM drive for software install
- AGP or PCI graphic card
- Monitor, color required, minimum resolution of 800 x 600
- Storage: A large, fast, hard drive for audio.
- For maximum performance, a dedicated ATA/IDE or SCSI disk drive(s), <u>such as those qualified with</u> <u>Pro Tools LE</u>, should be used.

Third-Party MIDI Controllers & Interfaces

Optional Digidesign Software

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 versions of the BIOS or Windows.

Need Advice on a Computer Purchase? Be sure to check out the Windows 98 User Configurations section of the Digidesign User Conference for computer recommendations from 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.

video and game controller. This device can be disabled from the "Device Manager" in the "System" Control Panel.

Digidesign 3401-A Hillview Avenue Palo Alto, CA 94304 U.S.A Tel 650.842.7900 Fax 650.842.7999 Product Information United States & Canada 1.800.333.2137 North & South America 650.842.6602 (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 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)



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)
D-Verb v1.7.1 (RTAS and AudioSuite)
Focusrite d3 v1.3.1 (AudioSuite)
Maxim v1.2.1 (RTAS and AudioSuite)
MP3 Export Option v1.0
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. 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.



MasterList CD Version 2.3 Requirements

Computer Requirements

MasterList CD version 2.3 is a Mac OS product which is qualified to run on any Power Macintosh computer listed in these <u>Digidesign Product Compatibility Documents</u>, with 8 MB of RAM dedicated to the MasterList CD application.

External Diskette Drive Requirements

A qualified external diskette drive is required for installations of MasterList CD when used with a Blue & White G3 or G4.

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

CD Recorder Requirements

Compatible SCSI-based CD Recorder. Download a PDF of the MasterList CD <u>Compatible CD Recorders Specification Grid here</u>.

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

- Pro Tools | 24 MIX & Pro Tools | 24 MIXplus
- Pro Tools | 24
- Pro Tools III
- Digi 001
- Audiomedia III

DAE & DSI optional

When a Digidesign system is used for higher quality output monitoring, MasterList CD v2.3 requires DAE 5.0.1, DigiSystem INIT 5.0.1 & the Direct I/O 5.0.1 extension. These files are installed by the MasterList CD v2.3 CD-ROM installer (also installed by the latest Pro Tools installer).



Known Incompatibilities With Older Digidesign PCI Card

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 directly to arrange this.