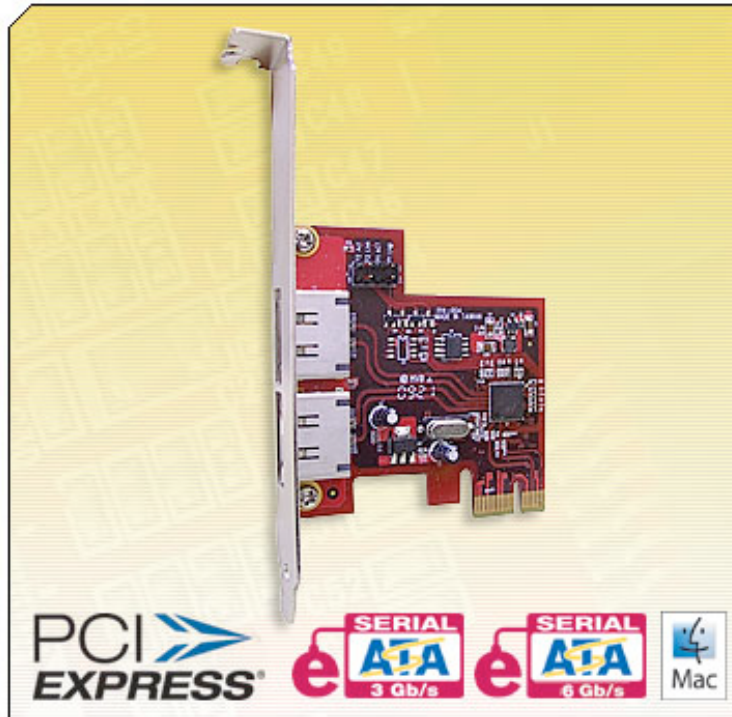


FirmTek

Store and Share your Digital Creations



SeriTek™ /e6G

**Two Port External Hot-Swap Serial ATA PCIe 6G Host Adapter
With Port Multiplication**

Macintosh User Manual

FirmTek, LLC
www.firmtek.com

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Changes

FirmTek reserves the right to make any changes to product design, specifications, or details without notice. Actual product photos or screenshots may look different from those provided.

Notice

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Before installing the SeriTek/e6G or any other hardware or software, you are responsible for backing up data contained on any storage devices. After hardware or software installation, you are responsible for backing up data on any storage devices at frequent intervals. FirmTek, LLC is not liable for any loss of data or damage to equipment resulting from the use of the SeriTek/e6G host adapter.

External Shielded Serial ATA Cable

The SeriTek/e6G host adapter uses specially shielded external Serial ATA cables to ensure integrity during data transfers. Please use caution and handle the cables carefully. Hold the connector at the ends (not the cable itself) when inserting and removing the cable from the SeriTek/e6G and the external enclosure. To maintain peak performance keep the number of cable insertions and removals to a minimum.

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I. Introduction

Welcome

Congratulations and thank you for purchasing the SeriTek/e6G Serial ATA host adapter. This product is another innovative solution made possible by the creative engineers at FirmTek.

About This Manual

This user manual was written with the assumption you are familiar with the Macintosh computer, and are comfortable with opening its case. For further information, and to get acquainted with your computer, please refer to your Macintosh user manual.

About Serial ATA Technology

An evolutionary replacement for Parallel ATA, Serial ATA (Advanced Technology Architecture) provides an interface that allows computer users to connect additional hard disks and peripherals. Serial ATA offers insulated cables that are thinner and longer with smaller 7-pin connectors which results in easier installation and improved airflow, compared to wider and shorter Parallel ATA cables. Improved airflow translates into a cooler operating environment for the Macintosh and hard disks.

About the Port Multiplier Specification

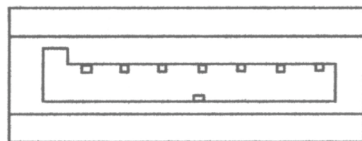
Originally, Serial ATA adapters and enclosures supported a single drive connected to a single port via a single cable. The maximum number of hard disks supported on a Serial ATA adapter depended on the adapter's port count. The Serial ATA port multiplier specification allows multiple hard disks to share a single port.

The SeriTek/e6G supports traditional direct-connect enclosures with one drive per port such as the SeriTek/2EN2, and port multiplier enabled enclosures with up to 5 drives per port such as the SeriTek/5PM. Two SeriTek/5PM enclosures can be used to support up to 10 hard disks. Port multiplier enabled enclosures such as the SeriTek/5PM include additional internal circuitry, which allows the connection of multiple hard disks to a single SeriTek/e6G port.

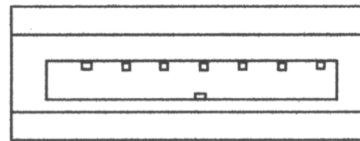
About the SeriTek/e6G Serial ATA Host Adapter

The SeriTek/e6G host adapter adds Serial ATA 6.0 Gbit/sec performance to the outside of the Macintosh computer chassis, enabling users with PCI-Express compatible Macintosh computers to take advantage of high performance external Serial ATA enclosures.

With two external port multiplier enabled Serial ATA ports and internal PCI-Express connectivity, the SeriTek/e6G host adapter provides the high bandwidth necessary to meet the needs of performance-hungry applications while offering hot-swap flexibility similar to that of Universal Serial Bus (USB) and FireWire. The SeriTek/e6G host adapter provides the latest I-shaped eSATA connectors.



Original L-shaped
Serial ATA connector



Newer rectangular
eSATA I-shaped
connector

SeriTek/e6G Package Contents

- SeriTek/e6G Serial ATA host adaptor
- CD-ROM Containing the Macintosh User Manual

SeriTek/e6G Key Features and Benefits

- Two-port eSATA 6G host adapter with 64-bit and 32-bit "Snow Leopard" compatibility
- Backward compatible with Mac OS X 10.4.6 or higher
- Compatible with all Apple Mac Pro models
- Compatible with PowerMac G5 (11,2) PCIe model
- Onboard SATA 6Gb/s PCI-Express 2.0 to Serial ATA controller chip
- Low power usage = Low Heat = No Fan Required = Quiet Operation
- Supports Disk Utility RAID 0, 1 and JBOD configurations
- S.M.A.R.T application support for third party Macintosh utilities
- PCI-Express 2.0 compliant, backward compatible with PCIe 1.0 slots
- SATA 6Gb/s compliant, backward compatible with SATA 3.0 and SATA 1.5 Gb/s
- Provides hot swap and PM support not available with internal Mac Pro bays
- Hot swap enclosure leaves internal Mac Pro bays open for Mac OS X and Boot Camp
- Complete CRC error checking, for all bits transmitted offers enhanced data protection
- Bus Mastering off-loads data I/O handling from CPU
- User-upgradeable firmware
- Utilizes standard eSATA connectors
- 2-port 6G controller with PM support, Oxford 936 and direct connect support
- Port multiplier support: Connect up to 10 drives using SeriTek/5PM enclosures
- Direct connect support: Connect up to 2 drives with a SeriTek/2EN2 enclosure
- Simple to install, easy to use

SeriTek/e6G Specifications

Hardware Requirements	<ul style="list-style-type: none"> • PCI-Express based Macintosh or Windows PC with an available PCI-Express Slot
Operating Systems Supported	<ul style="list-style-type: none"> • Mac OS X version 10.4.6 or later, Windows
Bus Type	<ul style="list-style-type: none"> • PCI-Express 2.0 x1 - Compatible with X4, x8, x16 slots • Backward compatible with PCI-Express 1.0
External Connectors	<ul style="list-style-type: none"> • 2-port external Serial ATA (SATA 6G) interface supports up to 2 external hard disk enclosures with eSATA connectors
Drive Types Supported	<ul style="list-style-type: none"> • SATA 6G hard disks, backward compatible with SATA 3G and SATA 1.5G hard disks
Data Transfer Rates	<ul style="list-style-type: none"> • Up to 500 MBytes/second or 5.0 Gbits/second burst data transfer rate with PCIe 2.0 bus
Drive Modes Supported	<ul style="list-style-type: none"> • SATA 6G with or without Native Command Queuing
Advanced Data Features	<ul style="list-style-type: none"> • Fully compliant with Serial ATA Revision 3.0 specification • Apple Port multiplier support: Run up to 10 drives with SeriTek/5PM Port Multiplier enclosures • Performs FIS-Based Switching with Port Multiplier • Spread Spectrum Clocking (SSC) • SATA 6G Device compliant • Bus Mastering off-loads data I/O handling from CPU • CRC error checking, for all bits transmitted (command, data, and status), offers enhanced data protection for high-speed Serial ATA drives • Two independent data channels allows for separate device timings • Automatically identifies and configures drive types
Onboard Flash ROM	<ul style="list-style-type: none"> • Allows easy upgrades to the latest firmware
Cables Supported	<ul style="list-style-type: none"> • 7-pin shielded SATA cable, up to 2 meter in length
Warranty	<ul style="list-style-type: none"> • One year limited parts & labor
Physical Dimensions	<ul style="list-style-type: none"> • 2.62" (L) x .3" (W) x 2.75" (H) (not including bracket)
Power Requirements	<ul style="list-style-type: none"> • 5V ± 5%
Environmental	<ul style="list-style-type: none"> • Temperature: <ul style="list-style-type: none"> Operating: +5°C to +55°C Non-Operating: -25°C to +70°C • Relative humidity: <ul style="list-style-type: none"> Operating: 20% to 80% Non-Operating: 15% to 90%
EMC Compliance	<ul style="list-style-type: none"> • EN55022/1998, EN55024/1998 (European Community) • FCC Part 15 Class B (US)

SeriTek/e6G System Requirements

Operating System

- Macintosh OS X version 10.4.6 or later, or Microsoft Windows

Hardware Requirements

- PCI-Express based Macintosh or Windows OS with available PCIe expansion slot
- External powered enclosure (with or without port multiplication support) equipped with Serial ATA hard disk(s).

Materials Required

- Standard medium-sized Phillips screwdriver may be required if computer does not have a PCI bracket with captive screws.

II. Installing the SeriTek/e6G



Caution:

Prior to installing the SeriTek/e6G host adapter and hard drive(s) or peripheral(s), please make sure your data is backed up.

The SeriTek/e6G host adapter and your Macintosh contain sensitive components that can be permanently damaged by Static Electric Discharge. Be sure you're working in an area free of static electricity to prevent them from being damaged. Use a wrist grounding strap if you have one or regularly touch a metal part of the computer chassis such as the power supply case or a port access cover to discharge any built-up static electricity from your body. Make sure to handle the SeriTek/e6G host adapter by its bracket or around its edges to avoid damage to the card by static electricity.

Introduction

This section describes the proper method of installing the SeriTek/e6G.

SeriTek PCI-Express Host Adapter Installation:

1. Properly shut down your Macintosh or PC and disconnect the AC power cord.
2. Open the side panel. On some models, the user may need to unscrew the captive screws in the PCI bracket to access the PCI-Express slots. Please refer to your computer user manual for more information about gaining access to PCI-Express slots.
3. Choose an empty PCI-Express expansion slot where you will install the SeriTek/e6G.
4. Remove the PCI slot screw or the PCI Bracket.
5. Remove the SeriTek/e6G from its protective materials. Make sure to hold the card by its bracket or around its edges to avoid touching components on the board that might be damaged by static electricity.
6. Position the PCI-Express card bracket by facing it towards the rear of the computer. Align the gold connectors of the SeriTek/e6G over the PCI-Express slot and gently press it into the PCI-Express slot until the card is firmly seated. If the card is properly seated, the upper ear of the PCI-Express card bracket should line up with the top of the PCI bracket mounting location.
7. Secure the card with the PCI screw or the PCI bracket (See Figure 1).



Caution: The SeriTek/e6G host adapter supports external cables that may be plugged in to one of their external receptacles. If the SeriTek/e6G is not properly secured when a cable is inserted into one of the receptacles, it may become loose from the PCI-Express slot and damage the computer.

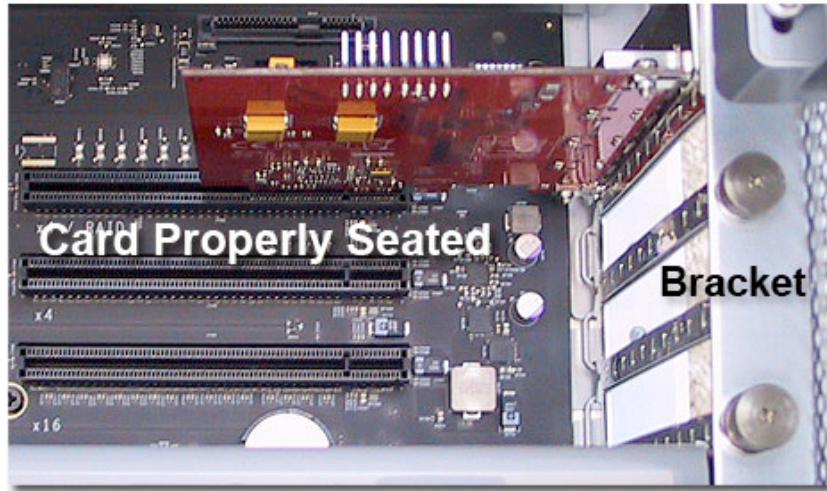


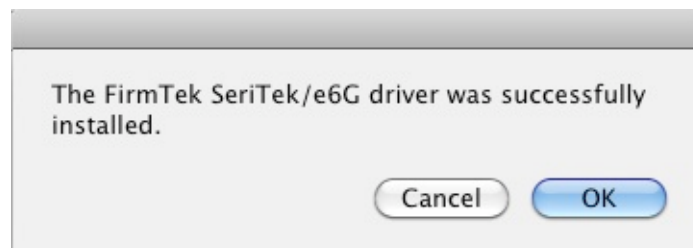
Figure 1: Inserting and securing a PCIe controller

8. Close your computer case and re-attach the AC power cord.

Apple Mac OS X Driver Install

The SeriTek/e6G host adapter is now installed in the Macintosh. Snow Leopard users will find the SeriTek/e6G controller can be used without a driver. The built-in AHCI driver found in Snow Leopard will work. However, the embedded AHCI driver does not support port multipliers and may not properly hot plug 936 based enclosures. Mac OS X users desiring the full features of the SeriTek/e6G will want to install the FirmTek driver. To install the FirmTek SeriTek/e6G driver please follow these steps.

1. Copy the SeriTek/e6G driver from the CD-ROM
2. Open the Mac driver disk image
3. Double click on Install-SeriTek-e6G
4. Insert the admin password
5. Click "OK"
6. Restart the Macintosh computer



III. Connecting External Enclosure(s)

Introduction

This section describes how to connect external hard drive enclosures and provides instructions for formatting the Serial ATA hard drive(s) using Apple's *Disk Utility*. If you decide to use a third party drive setup utility, please refer to the documentation provided with the utility.

Connecting the SeriTek/e6G to an External Enclosure

1. The SeriTek/e6G is compatible with a wide range of external enclosures. However, the enclosure must meet the following basic requirements:
 - Adequate power to support the hard drives (dedicated power supply)
 - 7-pin shielded receptacles compatible with FirmTek's shielded Serial ATA cable
 - Support for Serial ATA Version 1.0, 2.0 or 3.0
 - Enclosure must be able to support and mount the Serial ATA hard disks
2. Install hard disks into the external enclosure according to the instructions included with the enclosure.
3. Attach one end of FirmTek's shielded Serial ATA cable(s) to the Serial ATA receptacle(s) on the SeriTek/e6G and connect the other end(s) to the external enclosure. (eSATA cables are not included with SeriTek/e6G)

Note: FirmTek Serial ATA cables are specially designed to work with both PC and Macintosh computers. Please use FirmTek external shielded Serial ATA cables with the SeriTek/e6G.

- *The original Serial ATA connectors have an L-shaped opening, see Figure 2A.*
- *The newer eSATA connectors have a rectangular I-shaped opening, see Figure 2B*

The SeriTek/e6G uses the newer eSATA connectors, also known as I-shaped connectors. Some hard disk enclosures require SATA cables that utilize an L-shaped connector. For these types of enclosures, the cable required will have a rectangular I-shaped eSATA connector on one end, and an L-shaped SATA connector on the other end.

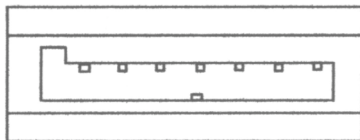


Figure 2A: Original L-shaped SATA connector

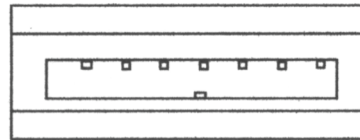


Figure 2B: Newer rectangular eSATA I-shaped connector

Figure 2: Serial ATA Connector Types: Original L-shaped and newer eSATA I-shaped

Note: If the SeriTek/e6G is being used with a hard disk enclosure that uses eSATA connectors, eSATA cables with have rectangular I-shaped eSATA connectors on each end will be required, like the two connectors shown in Figure 3.



Figure 3: Using SeriTek/e6G with a drive enclosure that has L-shaped eSATA connectors; both cable connectors will be identical.

Making the eSATA Connection

Caution: Be sure to connect the cable using the proper orientation to your SeriTek/e6G host adapter and external enclosure. It should easily snap into place. Please do not force the cable connector onto the host adapter or the SATA interface of the enclosure.

Remember the male and female connectors must be of the same type for a proper fit: L-shaped female to L-shaped male or eSATA female to eSATA male.

Cable connection problems?

- First verify that you are connecting the correct type of connectors to each other
 - If your connectors still do not fit, rotate the cable and try again
1. Install the hard disk(s) in an enclosure. If your enclosure is powered on and the Macintosh is running the hard disk(s) should appear in Disk Utility.
 2. If all storage devices connected to the SeriTek/e6G have valid system partitions the hard disk volume(s) will be mounted on the desktop. An icon will be displayed on the desktop for each valid Mac OS X partition attached to the SeriTek/e6G.
 3. If the storage device(s) have not been formatted for use with the Macintosh, a *Disk Insertion* messages will appear on the desktop for each unconfigured storage device. Select *Initialize* to configure your storage device, or *Ignore* if you wish to configure these disks later (see Figure 4). Note: Various Mac operating systems with differing RAID configurations may display slightly different messages.



Figure 4: Disk Insertion Window

Formatting Serial ATA Drives Using Macintosh OS X Version 10.5.x or Later

Turn on your Macintosh computer.

1. Open Apple's *Disk Utility* which is located in the Utilities folder of the Macintosh OS X start-up volume.

To open this application:

- a) Double click the Mac OS X startup volume
- b) Double click the *Applications* folder
- c) Double click the *Utilities* folder
- d) Double click the *Disk Utility* icon (See Figures 5 and 6 for examples)

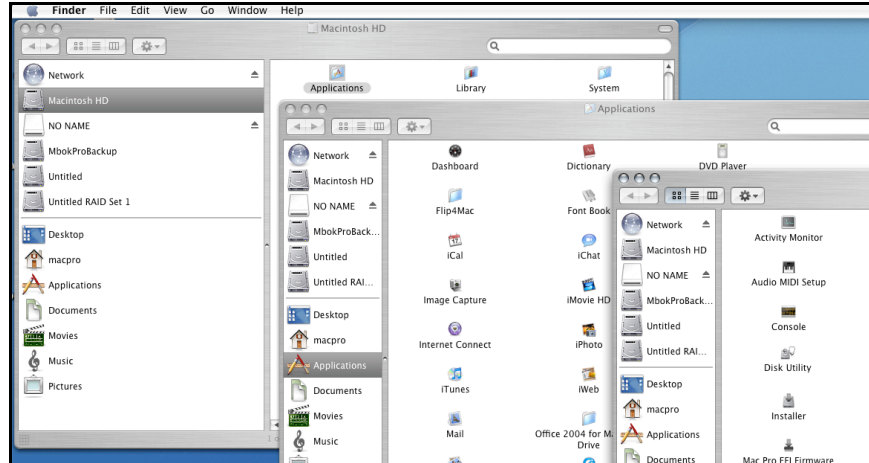


Figure 5: Locating Apple's *Disk Utility*

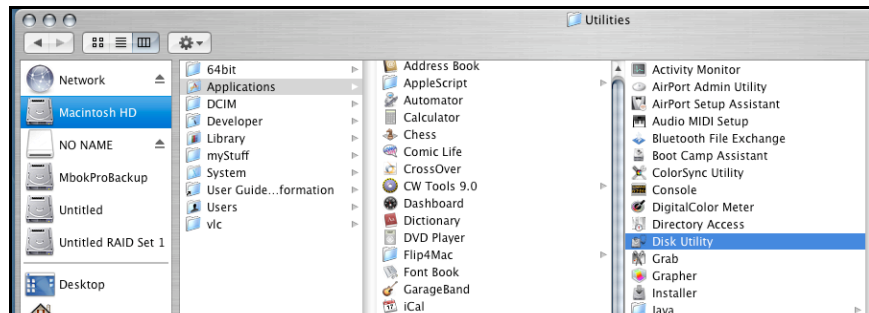


Figure 6: Alternate method for locating Apple's *Disk Utility*

2. Review the list of hard disks shown in *Disk Utility* (see Figure 7). Hard disks currently in use should have a volume name below their listing. New, unformatted disks typically have no volume name. Carefully select the hard disk you wish to format.

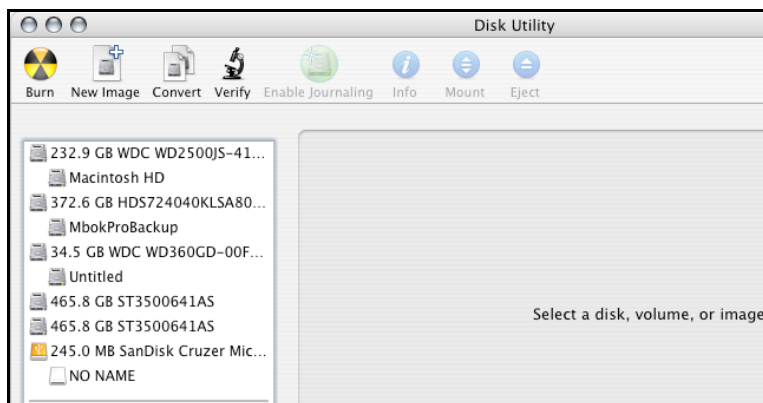


Figure 7: Example hard drive listing

3. After carefully selecting the hard drive you wish to format, select the *Erase* tab in Apple's *Disk Utility* (see Figure 8).

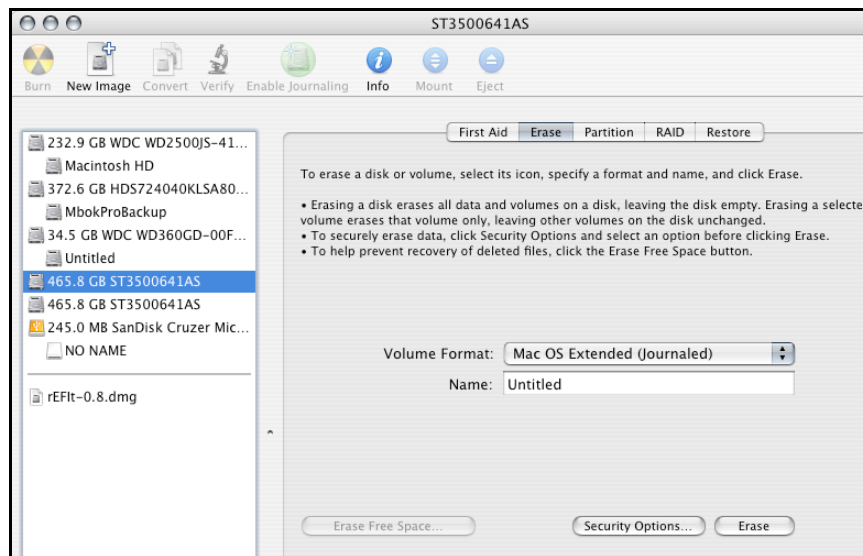


Figure 8: Selecting the *Erase* tab in Apple's *Disk Utility*

4. For *Volume Format*, the default choice is "Mac OS Extended (Journaled)."
5. In the *Name* field, users can type a name for the new hard disk.
6. Be sure to back up any data on the hard disk before clicking the *Erase* button to format the hard drive.
7. Click the *Erase* button to format the hard drive.
8. Once the hard drive is initialized, it will be displayed as an icon on the Mac OS X desktop.

Creating a RAID Volume

(Macintosh OS X version 10.5.x or Later)

Mac OS X 10.5.x or later Disk Utility RAID (Redundant Array of Independent Drives) options allow the user to display several hard disks as a single volume (SPAN - concatenated), provide data redundancy in case of a hard disk failure (RAID 1 - mirror), or increase performance and volume size by striping multiple disks into a single volume (RAID 0 – striped). Each method is described below.

Concatenated Disk Set - Apple Disk Utility can be used to create a concatenated disk set. A Concatenated Disk Set also known as SPAN is not one of the numbered RAID levels. This option simply combines two or more physical disks into a single virtual disk. No redundancy is provided. A backup copy should be maintained of any important data on the Concatenated Disk Set. As the name implies the disks are simply grouped together. Data is written to the first disk in the group until it is full and then it is written to the second disk, third disk and so on. If a hard disk fails only the data on that particular hard disk is lost. No additional performance is gained with the use of a Concatenated Disk Set. Concatenation is typically used to create a single large volume from several odd sized hard disks. Unlike RAID 0 or RAID 1, a Concatenated Disk Set does not require that the member hard disks be the same size to optimize the volume size of the virtual disk.

Mirrored RAID Set - Apple Disk Utility can be used to create a mirror. This is also known as a RAID 1 configuration. The hard disks should be the same size and model for optimal performance. Data written to a mirror volume is archived onto two separate duplicate hard disks. The mirror configuration provides redundancy that will usually protect data should a single hard disk fail. A mirror cannot protect against the user accidentally trashing an important file. In addition, if the mirror hard disk directory becomes corrupted the corruption will be copied to all hard disks in the mirror configuration. As a result, a backup copy should be maintained of any important data on the mirror. RAID 1 mirror performance equals the performance of the slowest hard disk in the mirror set. The RAID 1 mirror volume size equals the size of the smallest member disk. All data on hard disks used to create a new Disk Utility based mirror will be destroyed when the mirror is created.

Striped RAID Set - Apple Disk Utility can also be used to create a striped RAID set. This is also known as a RAID 0 configuration. The hard disks should be the same size and model for optimal performance. Data is spread (striped) equally across multiple hard disks for increased performance. A striped RAID set provides no data redundancy. As a result, should one hard disk fail all data stored on the RAID 0 volume is lost. While a striped RAID set provides excellent performance, a back up is required to protect important data. RAID 0 direct connect performance usually equals the performance of the slowest hard disk in the RAID 0 x the number of hard disks used. The RAID 0 volume size equals the size of the smallest member disk x the number of disks in the RAID 0. All data on all hard disks used to create a striped RAID set will be destroyed when the RAID 0 is created with Disk Utility.

Step by step instructions

1. Turn on your computer.
2. Open Apple's *Disk Utility* which is located in the Utilities folder of the Mac OS X start-up volume.

To open this application:

- a) Double click the Mac OS X startup volume
- b) Double click the Applications folder
- c) Double click the Utilities folder
- d) Double click the *Disk Utility* icon (See Figures 5 and 6 for examples)

- Review the list of hard disks show within *Disk Utility* (see Figure 7). Hard drives currently in use should have a list of volume names below them. New, unformatted drives typically have no volume names listed.
- Select the *RAID* tab in Apple's *Disk Utility* (see Figure 9)

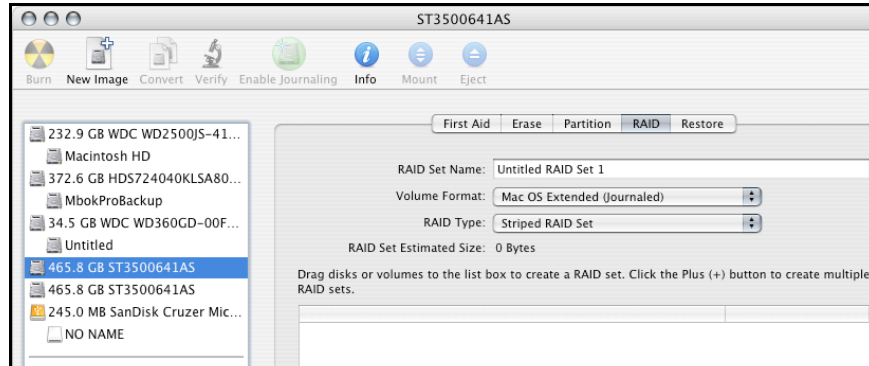


Figure 9: Selecting the RAID tab in Apple's *Disk Utility*

- Carefully select and drag a hard drive to add it as a member of the new RAID volume in the *Disk Utility* status window (Figure 10).

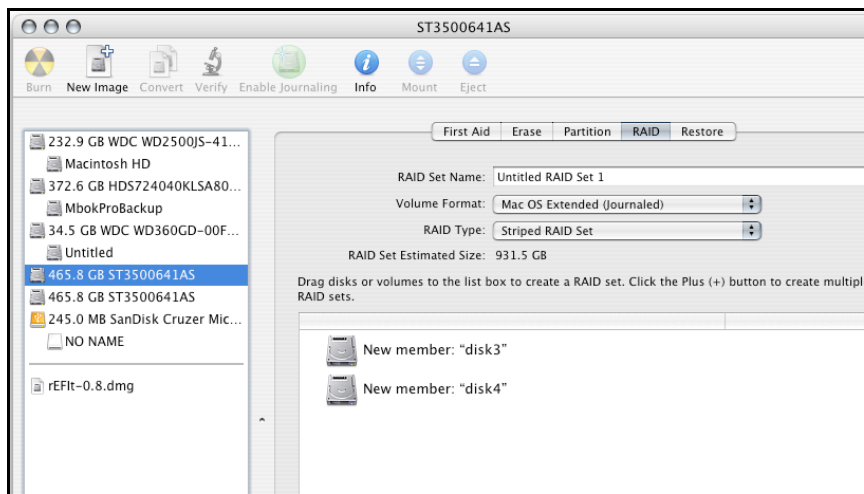


Figure 10: Example drives and options for a RAID volume;
Drag and Drop Drives into the RAID Set Window

- Repeat step 5 for each member for the RAID volume.
- Choose a *RAID Scheme*: Stripe or Mirror.
- Name the new RAID volume.
- For *Volume Format*, the default choice is "Mac OS Extended (Journaled)". Note: For Mac OS X 10.5.x and later users can select the RAID block size. For best performance push the option button and select a RAID block size of 64K or 128K (Figure 11).

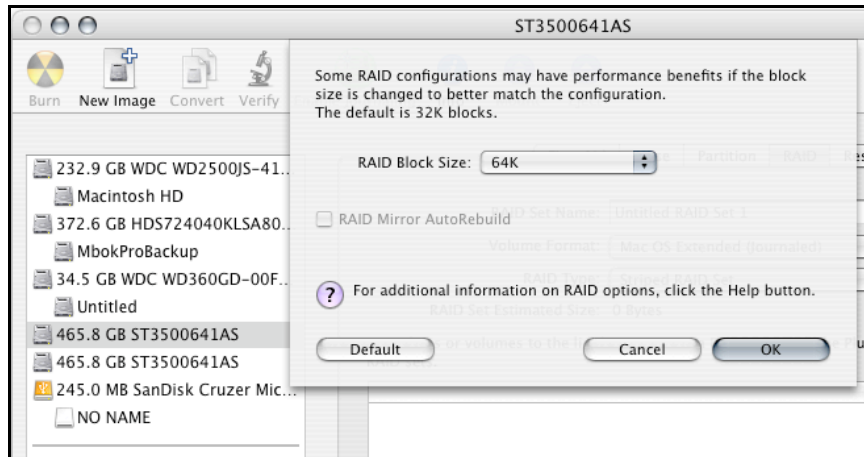


Figure 11: Selecting a RAID Block Size

10. After reviewing the options selected, click on the *Create* button to initialize the new RAID volume (see Figure 12).

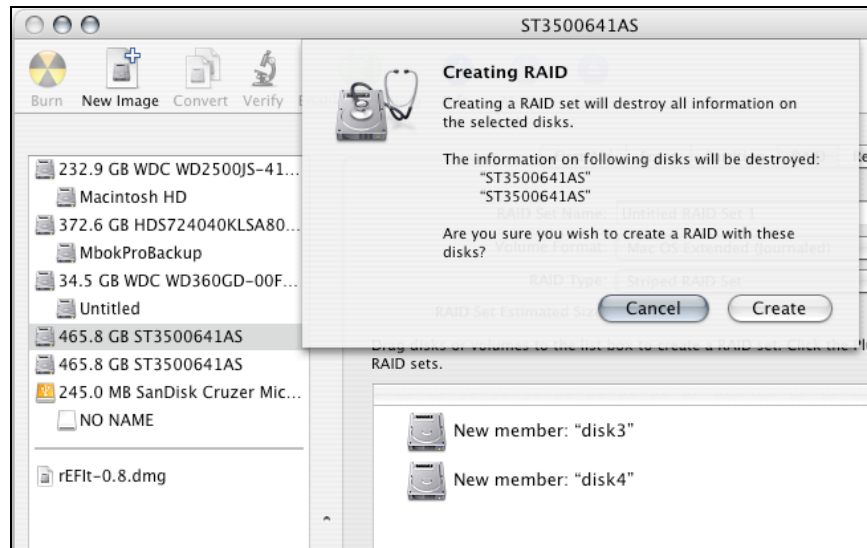


Figure 12: Creating a new RAID volume

11. After the RAID volume is successfully initialized, it should appear on the desktop.

IV. Using SeriTek/e6G Hot-Swap Functionality

Introduction

The SeriTek/e6G host adapter provides advanced hot-swap functionality that provides flexibility similar to that of Universal Serial Bus (USB) and FireWire. The user simply dismounts the hard disk from the desktop and then removes the hard disk from the FirmTek SeriTek/5PM or SeriTek/2EN2 enclosure. To mount a hard disk, simply insert the hard disk into the FirmTek enclosure. The easy to use, hot swap tray system provided with FirmTek enclosures provides the optimal compatibility with the SeriTek/e6G.

Hot-Swap Guidelines


- Do not disconnect or remove hard drives while transferring data.
- Save your work and close associated applications before removing the external hard drive (applications need to be closed since they may keep temporary working files open on the external hard drive).
- Always unmount the volumes (eject or drag the volumes to trash) associated with an external hard drive before removing it.
- Remove or power down every drive associated with a particular RAID volume before reintroducing them to the system. For example, do not remove just two drives of a four drive RAID volume and reinsert them. All four drives must be removed and then reinserted.
- As a general rule, power down the external hard drives after powering down the Macintosh computer. Power on the external enclosure before powering on the Macintosh computer.
- If the computer is waking from sleep, please wait 60 seconds before turning on the hard disk enclosure. On wake from sleep the driver requires 60 seconds to load before it can recognize the hard disks.

Hot-Swap Procedure

Connecting External Hard Drive(s)

If your Macintosh computer is not yet powered on, power on the external enclosure then power on the computer. If the Macintosh computer is already powered on, users can connect the external hard drive(s) without powering down the computer first.

Removing External Hard Drive(s)

 **Caution:** To prevent loss of data, save your work and close associated applications before removing the external hard drive (applications need to be closed since they may keep temporary working files open on the external hard drive). Always unmount the volumes (eject or drag the volumes to trash) associated with an external hard drive before removing it. Eject or drag all of the volumes associated with the hard drive(s) before disconnecting or removing them.

Improperly Removing External Hard Drive(s)

If you do not properly unmount volumes before removing the associated hard drive(s), a "Device Removal" dialog box will appear (See Figure 13). This dialog box shows up as a reminder to unmount volumes properly before disconnecting or removing external hard drives. Failure to properly unmount volumes before disconnecting external hard drives may result in lost data.

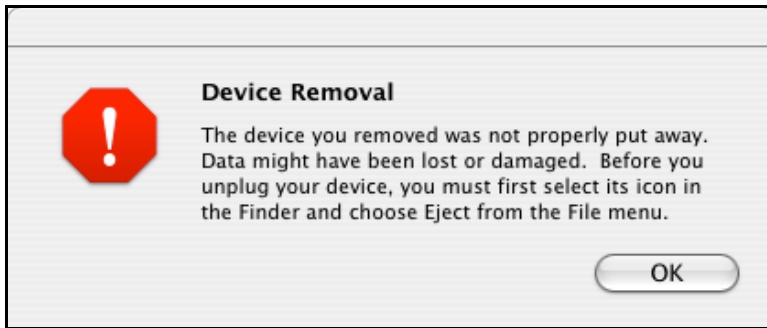


Figure 13: Improperly removing External Hard Drive(s)

V. Troubleshooting

- **The SeriTek/e6G host adapter does not seem to be recognized**

Check the SeriTek/e6G adapter by ensuring it is properly seated in the PCI-Express slot on the Macintosh motherboard. Verify that the proper driver is installed.

- **My hard disk won't work**

Check cables and connections. Ensure the 7-pin Serial ATA cable is properly oriented to the connectors on the SeriTek/e6G host adapter and the external enclosure. Ensure the hard drives in the enclosure are properly powered.

Apple System Profiler - Mac OS X

1. Open the *Apple System Profiler* by clicking opening the *Finder*, opening *Applications*, opening the *Utilities* folder, and double clicking on *Apple System Profiler*.
2. Select *PCI Cards* (Figure 14).

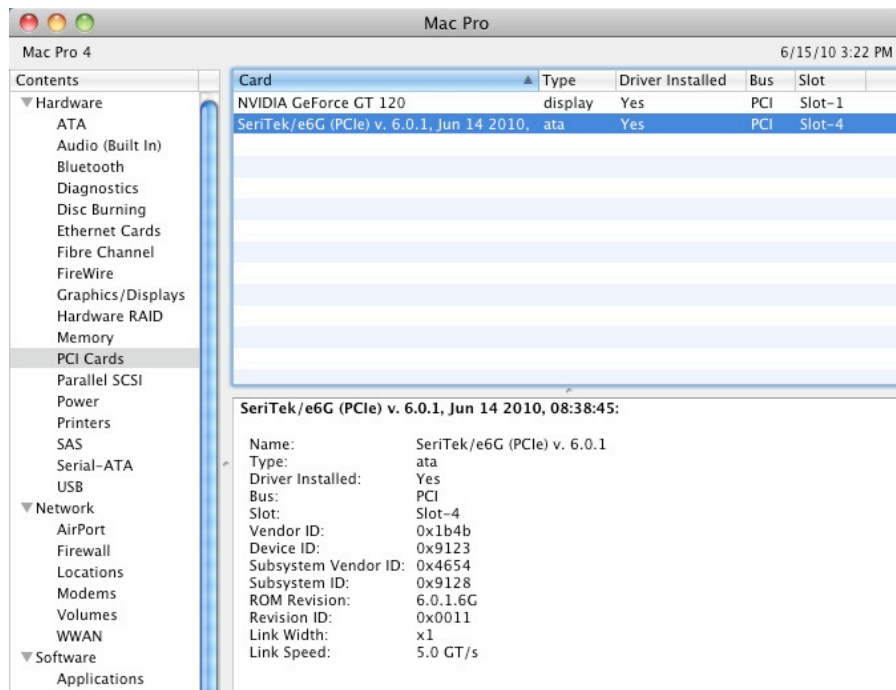


Figure 14: SeriTek/e6G Listed Under *PCI Cards*

3. Under *PCI Cards* section, SeriTek/e6G should show up as an "ata" card type.
4. If SeriTek/e6G is not listed, shut down the computer and try re-seating the card in the PCI-Express slot by removing and reinserting it. Repeat steps 1 through 3. If the SeriTek/e6G still doesn't show up in the *Apple System Profiler*, try moving it to another PCI-Express slot. (Note: If no FirmTek driver is installed the Apple Snow Leopard embedded AHCI driver can be used)
5. If the controller is listed, but the Apple System Profiler indicates that no driver is installed, please install the SeriTek/e6G driver found on the FirmTek CD or www.firmtek.com.

- **The transfer rate on my Macintosh seems less than the Serial ATA specified maximum of 500 Mbytes/sec.**
The 500 MB/s speed is the theoretical limit for a PCIe 2.0 slot. This is much higher than the performance of a single 3.5" SATA hard disk. The theoretical limit of a PCIe 1.0 slot is 250MB/s.
- **Does the SeriTek/e6G work with all Macintosh computers?**
No, SeriTek/e6G only works with Macintosh computers with at least one PCI-Express slot available. If your system lacks PCI-Express slots you cannot install the SeriTek/e6G.
- **My older Parallel ATA hard drives and peripherals have jumper settings. However, I can't find jumper settings on my new Serial ATA hard drive or peripheral. How can I set it to Master or Slave; is there any way to set the SCSI ID?**
Serial ATA hard drives and peripherals are internally configured as Master drives. There is no need to change settings on either the drive or the controller.
- **Port Multiplication works with my Mac Pro but does not work in my Windows 7 computer with the SeriTek/e6G.**
The SeriTek/e6G 6.0.1 driver provides port multiplier (PM) support for Apple computers. The Windows 7 built in AHCI driver does not support PM enclosures with the SeriTek/e6G. A separate PC driver on the CD can be used to enable PM on a Windows 7 PC.
- **Does the SeriTek/e6G require a driver?**
The FirmTek SeriTek/e6G can be used without a driver on Mac Pro systems running Mac OS X 10.6.x. In this case, the built-in Mac OS based AHCI driver is used to control the functions of the SeriTek/e6G. Port multiplication support is not available via AHCI. FirmTek developed the SeriTek/e6G 6.0.1 driver for the Mac Pro so that PM enclosures can be supported. In addition, the FirmTek SeriTek/e6G 6.0.1 driver for Mac adds other features like hot plug support for Oxford 936 based enclosures.

VI. Product Support

Technical Support

For additional information on how to use SeriTek/e6G, download the latest firmware updates, or for technical assistance, please visit us at www.firmtek.com, or email us at support@firmtek.com.

Please provide the following information when contacting us:

- Product model and serial number
- Firmware version (Use the Apple System Profiler as described in the troubleshooting section to determine the firmware version. Look for ROM # and Revision #)
- Macintosh model
- Macintosh OS type and version (example: Mac OS X, version 10.5.8)
- Hardware and software installed on your system
- Contact information including daytime telephone number and email address
- A detailed description of the question or problem

Return Merchandise Authorization

If FirmTek technical support determines the product needs to be repaired or replaced, a Return Merchandise Authorization (RMA) number and shipping address will be provided. Please pack the SeriTek/e6G in the original shipping container along with all of the original packaging - including the static bag, all hardware, software, cables, and other accessories that came with the original product. You are responsible for shipping and insurance costs, and any damage incurred due to improper packaging or transport.

FirmTek reserves the right to determine whether the product will be repaired or replaced with new or refurbished parts, or with a new or refurbished product. Standard United States return shipping charges will be paid by FirmTek. Foreign and other shipping methods such as express shipping are available for an additional charge.

Write the RMA number on the outside of the shipping container, and include the following information with the shipment:

- A description of the problem
- A copy of the original purchase invoice
- Return shipping address
- Contact information including daytime telephone number and email address

FirmTek, LLC reserves the right to refuse shipments missing a valid RMA number.

VII. Product Warranty and Disclaimers

FirmTek warrants to the original buyer only that this product shall be free from defects in material and workmanship for a period of one year from the original date of purchase. This warranty is valid only when the original purchase invoice is provided. This warranty shall not apply to any defects resulting from improper handling, misuse, misapplication, abuse, or unauthorized modification(s) which are performed by end user.

FirmTek, LLC reserves the right to make changes to any products described in this manual at any time without notice. FirmTek, LLC assumes no responsibility for the use or reliability of hardware or software that is not supplied by FirmTek, LLC or its affiliated companies. FirmTek, LLC does not assume any responsibility or liability arising out of the application or use of any product described in this document, except as expressly agreed to in writing by FirmTek, LLC; nor does the purchase or use of a product from FirmTek, LLC convey a license under any patent rights, copyrights, trademark rights, or any other intellectual property rights of FirmTek, LLC or third parties.

VIII. Regulatory Compliance Statements

Federal Communications Commission Radio Frequency Interference Statement

WARNING: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy, and if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. However, if this equipment does cause interference to radio or television equipment reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between equipment and receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/television technician for help.
- Use a shielded and properly grounded I/O cable and power cable to ensure compliance of this unit to the specified limits of the rules.

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference and (2) this device must accept any interference received, including interference that may cause undesired operation.

CE European Union Compliance Statement

EMC compliance:

Emissions: EN55022: 1998, Class B
Immunity: EN55024: 1998
EN61000-4-2: 1995+A1: 1998
EN61000-4-3: 1995+A1: 1998
EN61000-4-4: 1995
EN61000-4-6: 1996
EN61000-4-8: 1993