

Section13 Keyboards & storage

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For Section 13c, Keyboards & Storage use Quick Dial #: 831

KEYBOARDS & STORAGE BELLA

KEYBOARDS

1171

DV Keyboard 3.0

Now in its 3rd generation, the DV Keyboard 3.0 allows maximum flexibility for all of your video editing needs. It features the world's only built-in jog/shuttle controller, two USB 2.0 ports for direct, high-speed connectivity, and three ports for the optional NeoLite. Also included are free high-quality sticker sets to help you learn and edit more quickly, and multimedia keys for further productivity. Utilizing Bella's unique hybrid technology, the DV Keyboard works on both Mac and PC platforms.

- Integrated programmable jog/shuttle controller – the world's only keyboard to offer this to video editors. Having the jog/ shuttle right at your fingertips allows you to edit more efficiently and feel more connected to your audio and video clips, all without your hands ever having to leave the keyboard.
- The shuttle (outer) ring allows play and hold at the speed you want (turns 90° in either direction), while the jog (inner) wheel allows more finite frame by frame control The faster you spin the wheel, the faster your video moves. Additionally, the two Specialty Keys can be programmed for commonly used commands, such as Mark In and Mark Out. Editing your videos has never been easier!
- ◆ Optional NeoLite features dual LEDs and a 12" flexible gooseneck that plugs into any of three power ports in the keyboard leaving all USB ports free. Use the NeoLite to illuminate the keyboard or the workspace around
- Two USB 2.0 ports for connecting high-speed USB Flash and Hard Drives



- International symbols allow access to most European letters & symbols
- ◆ Includes high-quality sticker sets for Sony Vegas and Apple Final Cut Pro/Express.
- Incorporates a unique Hybrid Technology, allowing it to work on either Mac or PC

 DV Keyboard 3.0 for Mac and Windows - USB (Mfr # 4200 · 8&H # BEKBDV3)
 119.95

 DV Keyboard 3.0 for Sony Vegas - USB (Mfr # 420005 · 8&H # BEKBDV3SV)
 169.95

 DV Keyboard 3.0 for Premiere Pro - USB (Mfr # 5201 · 8&H # BEKBD3FCP)
 169.95

 DV Keyboard 3.0 for Final Cut Pro - USB (Mfr # 5200 · 8&H # BEKBP3FCP)
 169.95

 DV Keyboard 3.0 for Avid Xpress - USB (Mfr # 5200 · 8&H # BEKBP3AX)
 CALL

 Pro Series Keyboard 3.0 for Avid Media Composer - USB (Mfr # 5203 · 8&H # BEKBP3AMC)
 169.95

 NeoLite Gooseneck Light (Mfr # NEOLITE · 8&H # BENL)
 14.95

System Requirements for PC

Any PC with an available USB port running on Windows 98, 2000, XP and Windows Vista. A direct connection to the computer's USB port.

System Requirements for Mac

Any Mac with an available USB port with OS X v10.4 and above. Direct connection to the computer's USB port.



- Multimedia keys allow you quick and easy access to common programs
- Two USB 2.0 Ports located on the back of the keyboard function as a hub for all of your USB devices
- International symbols printed on the front of the keycaps correspond to most European languages.

Advantage Series 2.0

Bella completely updated their Advantage Series 2.0 keyboards. In addition to the color and icon coded keycaps that made the first generation of the Advantage Series keyboards a hit, they added two USB 2.0 ports, multimedia keys, and a sleek new design making the new Advantage Series 2.0 an even better product – while still keeping a very economical price.

- ◆ Color and icon coded keycaps designed for Premiere Pro and Final Cut Pro
- Can be used as a standard keyboard with all your favorite applications
- Adobe Premiere Pro and Avid Media Composer models incorporates unique Hybrid Technology, allowing it to work on either Mac or PC platforms.



M89

KEYBOARDS & STORAGE

LOGICKEYBOARD

APPLICATION SPECIFIC KEYBOARDS

The absolute key to working quickly and efficiently with post production editing applications is the significant number of embedded - often hidden helpful key commands provided by the software manufacturers. Since the introduction of Application Specific Keyboards by LogicKeyboard, they have become the essential accessory for beginners and experts alike. LogicKeyboard's comprehensive range of keyboard products provides a functional and stylish design with excellent graphical artwork, featuring logical grouping, clear bright colors and friendly icon coded printed keys.

Apple Final Cut Pro Ultra Thin M89 Alu Keyboard

Logickeyboard's custom keyboard for Apple Final Cut Pro is based on the original Ultra Thin Alu Apple Pro keyboard. It offers plug-and-play setup with current USB-equipped Macintosh computer,s with good feel and stylish, modern appearance that match the "new Apple look".

Ideal for post-production facilities, professional video editing houses and anyone else who requires all the custom key commands to be readily accessible from a dedicated, clearly labeled, color-coded keyboard. Using this keyboard is also a great way to learn the Apple Final Cut Pro / Express key commands.

M89 Apple Final Cut Pro Ultra Thin Alu Keyboard (*Mfr* # *LKBU-FCPX-M89*)Call

LogicSkin Final Cut Pro M89 Alu Keyboard (Mfr # LS-FCP-M89).....Call

for Adobe Premiere CS-3

Custom keyboard for Premiere Pro CS3 has good feel and a stylish modern appearance. Makes controlling Premiere PRO CS3 a lot simpler and faster. It is ideal for post-production facilities, professional video editing houses and anyone else who requires all the custom key commands to readily accessible from a dedicated, clearly labeled, color-coded keyboard. Using this keyboard is also a great way to learn the Adobe Premiere's key commands.

Adobe Premiere Pro CS3 Apple G5 Keyboard - USB (*Mfr # LKBU-PPRO3-APG5-US*

• B&H# LOKBPPM)129.50

Adobe Premiere Pro Customized Classic Keyboard - Grey/PS/2 (Mfr # LKBU-PPRO-CHPC-US • B&H# LOKBPPP)........72.95

Adobe Premiere Pro CS3 Ultra Thin Alu US Keyboard (Mfr # LKBU-PPRO3-M89-US)Call

for Avid Xpress DV/Pro

Classic Keyboard for Avid Xpress DV/Pro for Windows - Grey PS/2

(Mfr# LKBU-DVXP-CHPC-US • B&H# LOKBPXDVW)72.95

Classic Keyboard for Avid Xpress DV/Pro for Windows - USB and PS/2 (Mfr# LKBU-DVXP-CHPCC-US • B&H# LOKBCXDVW)...97.95

Classic Keyboard for Avid Xpress DV/Pro for Windows - USB (Mfr# # LKBU-MCOM-CHPCC-US • B&H# LOKBCMCW)......119.95

Multimedia USB Keyboards for Final Cut Pro



 Compatible with Apple Final Cut Pro 5 & 6 and Final Cut Express HD 3.5 & 4.0

Final Cut Pro (Extended Keyset) Apple G5 Keyboard - USB (*Mfr* # *LKBU-FCPX-APG5-US* • *B&H# LOKBFCPG5Q*).**103.50**

Final Cut Pro (Extended Keyset) Keycaps for Apple G5 Keyboard (*Mfr # LKSU-FCPX-APG5-US • B&H# LOKCFCPG5Q*) ...**68.50**

for Avid Media Composer

Avid Media Composer Apple G5 Keyboard -USB (*Mfr* # *LKBU-MCOM-APG5-US*

B&H# LOKBMCM)119.95

Avid Media Composer Wireless Apple G5

Classic Keyboard for Avid Media Composer for Windows - USB and PS/2 (Mfr# LKBU-MCOM-CHPCC-US • B&H# LOKBCMCW) ..97.95

Avid Media Composer Ultra Thin Alu US Keyboard (Mfr # LKBU-MCOM-M89-US)......Call

LogicSkin Avid Media Composer M89 Alu Keyboard (Mfr # LS-MCOM-M89-US)......Call

for Grass Valley EDIUS

Classic Keyboard for Canopus Edius Pro 3.0 for Windows - USB and PS/2 (Mfr# LKBU-EDIUS-CHPCC-US • B&H# LOKBCE)........97.95

for Sony Vegas

Classic Keyboard for for Sony Vegas for Windows - USB and PS/2 (Mfr# LKBU-VEGAS-CHPCC-US • B&H# LOKBCV)..........97.95



KEYBOARDS & STORAGE WORLD TECH

SPECIALIST KEYBOARDS

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Application Specific Keyboards

Designed based on specification from Apple, the Specialist keyboard and QuickCover are designed to help Final Cut Pro users locate important shortcut commands quickly, and maximize the use of shortcut commands built into the Final Cut program.

Designed with more shortcut commands than any other

Final Cut keyboard, the Specialist keyboard includes more than 115 laser etched icons and text commands of shortcuts. Color keycaps denote command categories, including Palettes, Image, Layers, File, Edit/Select, and View.

- Includes more than 115 color-coded Final Cut commands
- Designed for Final Cut Pro and is applicable for Final Cut Pro HD and Final Cut Express HD software users
- Color keys denote command categories, including Navigation, Editing, Timeline, Tools, Markers, and others.
- Quick reference card with descriptions of shortcut icons

QuickCover

- Glidecoat coating for smooth movement from key to key
- Quick to install and remove

QuickCover for aluminum USB keyboard (*Mfr* # 215-601• *B&H*# WOWKBCFCP)**29.95**

Apple Pro USB Keyboard

- Two built-in USB ports for mouse or other USB devices
- ♦ USB version includes 3-foot USB ext. cable

Apple Pro Keycaps Kit

- Replaces keys on your G5 USB or wireless keyboard protecting your hardware investment
- Easy to install with key puller included
- Quick reference card with descriptions of etched icons

Apple Pro Keycaps Kit Upgrade Kit for White Apple G5 USB/Bluetooth Keyboard (*Mfr* # 215-401• B&H# WOKCFCPA)......**39.95**

For Avid Xpress for Macintosh

Designed based on specification from Avid to help Xpress Pro users locate important shortcut commands quickly, and



maximize the use of shortcut commands built into the Xpress program.

Avid Xpress Specialist Keyboard

- Includes more than 50 clearly laser-etched Xpress commands icons
- Color keycaps denote Xpress command categories, including Previewing, Markers, Editing, Jump to points, and Tracks.
- Two built-in USB ports for mouse or other USB devices

Avid Xpress Specialist Keyboard

(Mfr # 222-201 • B&H# WOKBAXDVPA)......69.99

For Adobe Premiere CS3

Adobe Premiere Pro CS3 Specialist

Keyboard USB, Black

(Mfr # 111-203-B • B&H# WOSKAPCS3)**79.95**

Adobe Premiere Pro CS3 Specialist

Keycap Upgrade Kit

- Upgrades WorldTech keyboard from Premiere Pro CS2 to CS3
- Includes key puller and CS3 shortcut quick reference

Adobe Premiere Pro CS3 Keycaps Upgrade Kit from CS2 to CS3

(*Mfr* # 111-403-B • B&H# WOKCUCS123).....**14.95**

Keycaps Kit

- Replaces keys on your Apple G5 USB or wireless keyboard protecting your hardware investment
- Easy to install with key puller included
- Quick reference card with descriptions of etched icons

For Grass Valley Edius Pro

- Designed for the latest version 4.5 EDIUS software. Color keycaps denote EDIUS command categories, including Scaling, Editing, Play/Pause, File & Clipboard operations
- Includes as much as 100 laser etched icons and text icons of EDIUS commands
- ◆ Twelve pre-programmed multi-media keys

EDIUS Pro 4.5 Specialist Keyboard USB, Black (*Mfr # 127-203-B* • *B*&*H*# *WOKBCEP45*)**86.95**

EDIUS Specialist Keyboard USB, Black (Mfr # 107-201-B • B&H# WOKBBE)64.95

EDIUS Specialist Keyboard USB, White (Mfr # 107-002 • B&H# WOKBWE)74.95





MediaVault

High Performance, High Value Storage Solutions for Content Creation

Ciprico products are designed with high performance digital media applications in mind. Whether in animation, editing, or graphics, if the need is for maximum bandwidth at the desktop, the MediaVault disk arrays are the ideal tool for recording or playback of uncompressed (or compressed) SD and HD resolution video content. Available in U320 SCSI and 4Gbit Fibre Channel versions, there is the flexibility of choosing to keep the storage at the desktop or moving it from the desktop to a networked (SAN) configuration, thus providing the means to streamline the content workflow all the way from capture through processing to playback.

As the volume of these created digital media assets grows, the need for scalable, reliable, protected storage becomes more relevant, so the expandability and RAID 6 features of the MediaVault systems are necessary components for creating a secure online archive. Beginning with a single 4Gb 4110 model attached to a dedicated server and daisy chaining units progressively as capacity demands, the cost and security of archive data can be successfully managed.



As the whole DI workflow has migrated from "big iron" to the desktop on high performance Windows, Linux or Mac based workstations, Ciprico's desktop and networked storage solutions have followed step, offering unmatched price/performance via the MediaVault 4Gb RAID systems, deployed in real time 2k and 4k film post processes either as direct-attached devices on color correction or edit and conform stations, or on SAN-based configurations for complete facility DI workflow management.

MediaVault 4Gb FC (Fibre Channel) RAID Disk Arrays

Powerful 4Gb Fibre Channel RAID Storage with daisychain option for simple capacity expansion and workflow performance gains.

- Single or Dual 4Gb Fibre Channel interface
- Fibre expansion technology for daisychaining of multiple RAID systems
- ATA disks
- ◆ Selectable RAID level options (0,3) or (0,6)
- ◆ RTR Real Time RAID reconstructs data on the fly
- ♦ HDT High Definition Turbo mode ensures HD data rate throughout the entire array
- ◆ Compatible with Mac, Windows, Unix, Linux
- Compatible with major brands of video editing, capture and playback cards/devices and software

Fastest Desktop Performance

MediaVault 4Gb FC products are second generation, market-proven RAID disk arrays capable of sustaining 250MB/s per interface. A single MediaVault channel will record and play back 1080i HD 10 bit video or 4 uncompressed SD video streams, and the dual channel 4210, which doubles the above rates, sets industry standards in content creation, being scalable to the point of delivering up to 4k film resolution playback to the desktop.

Expanded Connectivity

The expansion feature of the MediaVault 4Gb product enables physical connection of multiple units on the same host system interface in a "daisychain" fashion, giving the user the capability of READ and Write speeds of up to 380MB/s per interface, and capacity expansion to several tens of Terabytes of data and hours of video or film resolution footage.

High Reliability

The MediaVault is user configurable for RAID level 0 or 3 and now for ultimate protection RAID 6 is available on select models. Use RAID 0 to realize the greatest performance. Use RAID 3 for excellent performance with no degradation or data loss if a drive fails. Use RAID 6 for excellent performance and maximum data protection with no degradation or data loss if up to 2 drives fail!

Design Flexibility

The MediaVault 4105 has a single RAID 0,3 controller and five removable disks in a tower configuration. The 4210 offers either dual RAID 0,3 controllers or a single RAID 0,6 controller with ten removable disks in a rack mount chassis. The 4110 has a single RAID 0,3 or RAID 0,6 controller and 10 non-removable disks in a 1U rack mount enclosure for the best \$/MB in the most compact chassis.



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HETTY 720 fps	375	145	HOT'S 720 fps	188	272
NTIC fair	991	410	NTSC fire	495	455
FAL TOU	#36	767	PAL TON	-418	383
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	125	115	HOTY 1080 fee	. 12	87
HOTH 720 fee	282	259	H011/ 720 \$PE	384	151
NTSC Ips	743	642	NEC BA	431	336
PAL fps	\$27	\$71	PAL 521	185	135

Application Compatibility

MediaVault 4Gb Fibre Channel products are certified with multiple hardware and software vendors (including AJA, Blackmagic Design, Bluefish444, Matrox, Adobe, Assimiliate, Digital Vision/Nucoda, Iridas, ATTO Technology, Aurora Video Systems, Canopus, CharisMac, Dalsa, Digital Rapids. Drastic Technologies. Digital Ordinance, Leitch and Tiger Technology) in video content creation and film Dl.

MediaVault

1175

Test. Disk Read/Write	Kona21 4096.0	Mode0/DiskWhackTest - ME Write: 614.0 MB/s Read: 648.9 MB/s
Start		
Options Volume Kona2Mode0	io]	File Size:

MediaVault 4110

Ideal for non-linear editing and real time single-stream HD uncompressed capture & playback, the ultra slim 1U rackmountable MediaVault 4110 features front mounted

fibre Channel connections and 10 ATA drives. Perfect for when space is at a premium, capacity and performance are scalable. Features over 300 MB/sec sustained performance up to 5TB and allows you to switch between RAID 0 (performance) or RAID 3 (protected). Plenty of performance to support 10-bit HD applications.

MediaVault 4105



Ideal for non-linear editing and real time single-stream HD uncompressed capture & playback, the 4Gbit Fibre Channel MediaVault 4105 features Ciprico's state-of-the-

art 4Gbit controller and third generation ATA based RAID technology. Offers better than 250 MB/sec sustained performance up to 5TB and allows you to switch between RAID 0 (performance) or RAID 3 (protected) selectable. The attractive desktop chassis features built-in Fibre Channel HUB, 5 removable drives, removable power supply and easily supports 10-bit HD applications.

MediaVault 4210



Ideal for non-linear editing, real time singlestream HD uncompressed

capture & playback, and real-time 2K/4K film workflow, the third-generation MediaVault 4210 is essentially two 4105's in a 3U rackmount chassis. Incorporating a dual channel 4Gbit interface capable of sustaining 500 MB/sec., the MediaVault 4210 easily supports uncompressed 4:4:4 HD applications. Features SFP (Small Form-factor Pluggable) optical LC Duplex tranceivers and is switchable RAID 0 (performance) or RAID 3 (protected) selectable. Supports Windows, Mac, Linux, Unix and SGI IRIX and Sun Solaris OS. Offers up to 10TB capacity and has built-in diagnostics.



CIPRICO

MEDIAVAULT 4FB FC ARRAYS

	4105	4210	4110
Available Configurations			
RAID Level	RAID 0,3	RAID 0,3 or 0,6	RAID 0,3 or 0,6
	5 Drive	10 Drive	10 Drive
Model	4105-1250 (1250GB)	4210-2500 (2500GB)	4110-2500 (2500GB)
(Capacity)	4105-2500 (2500GB)	4210-5000 (5000GB)	4110-5000 (5000GB)
	4105-3750 (3750GB)	4210-7500 (7500GB)	
	4105-5000 (5000GB)	4210-10TB (10000GB)	
Performance			
Burst	400 MB/s	800 MB/s	400 MB/s
Maximum	300 MB/s	Near 600 MB/s	300 MB/s
Minimum	100 MB/s	200 MB/s	100 MB/s
Host Interface			
Туре	Single Channel	Dual Channel	Single Channel
	4 Gb FC	4 Gb FC	4Gb FC
Topologies	Arbitrated loop, fabric switching	Arbitrated loop, fabric switching	Arbitrated loop, fabric switching
Physical connector	SFP-to-LC	SFP-to-LC	SFP-to-LC
Disk Drives			
Single drive capacities	250GB, 400GB, 500GB	250GB, 400GB, 500GB	250GB, 400GB, 500GB
Drive Interface	Parallel ATA	Parallel ATA	Parallel ATA
Physical Dimensions			
Chassis	Tower	Tower or Rack Mount	1U Rack
Dimensions	6.25" x 11" x 12.5"	7″ x 19″ x 12.25″	19″ x 1.75″ x 25″
Weight	20 lbs	50 lbs	40 lbs

MEDIAVAULT U320r /U320rx

Single and Dual-Channel SCSI RAID Disk Arrays



Reliable RAID solutions, the single-channel U320-R and dual-channel U320-RX have a sustained READ/WRITE performance of 200MB/sec per SCSI channel in HDT mode, and can record and play back the highest quality video, from standard definition up to dual stream uncompressed HD 1080i at 10 bit. The U320-R supports a single SCSI channel and five disk modules in a tower configuration with up to 2TB of storage. The U320-RX supports dual SCSI channels and up to ten disk modules for up to 4TB of storage. It can be configured for tower or rack mounting.

Both can be configured for RAID 0 (performance) or RAID 3f (protected) operation. In RAID 0 mode, all the drives are used for storage, providing maximum performance. In RAID 3 mode, you can continue working with no degradation in performance and no loss of data should a drive fail. The onboard RAID controller takes care of formatting, striping and all RAID functions.



6

MEDIAVAULT 5100 SERIES

External PCIe Storage Arrays

Based on the new PCI Express (PCIe) external expansion and cable connection standard, the MV5100 series expands your PC, server or workstations core logic PCIe bus outside of the box, enabling the ultimate in direct attached storage. At a raw speed of 20Gbps, overheads from protocol conversion to serial protocols such as Fibre Channel, Inifiniband or

Ethernet are totally eliminated. Based on Ciprico's robust RAIDCore host software stack, data is transferred directly from the disk drive cache to the host CPU's memory, eliminating any host cache interference problems often encountered with traditional hardware accelerated RAID techniques.

Powered by Ciprico's RAIDCore technology, MediaVault offers a greatly enhanced RAID feature set including on-line capacity expansion, RAID level migration and flexible drive numbers and sizes. No longer is a user tied to a fixed number of drives. For example, the MV5108 8-drive family with 8 drives populated may be upgraded to a full 16 drive version by simply exchanging the 8 port card with a 16 port RAIDCore adapter and add additional drives one or more at a time expanding both capacity and speed incrementally in line with project needs.

FEATURES

- Includes PCIe host adapter and cable
- 20Gbps host link over 3 or 7 meters of PCIe cable
- 2, 4, 6, 8, 12 and 16TB or high performance SAS or SATA II storage
- ◆ RAID 0, 1, 1n, 5, 10, 10n, 50, JBOD
- Zero buffer technology minimizes transfer latency
- ◆ Zero protocol conversion
- End to end high performance serial technology – all the way to the drives
- Online Capacity Expansion (OCE)
- Online RAID Level Migration (ORLM)
- Controller spanning; Mirror splitting
- Selectable boot array; Hide/unhide array
- Drive roaming
- Cache support: No cache, read cache, read with write back cache, write back
- Programmable staggered spin-up
- Background array initialization
- Create and delete without reboot
- Background and scheduled consistency checks
- Advanced array partitioning



- E-mail event notification
- NT event log integration

Robust Data Protection and Management

Offering multiple levels of user selectable mirrored or striped parity RAID, the highest level of protection can be achieved. For the ultimate desktop protection, the MV5100SR offer users with the ability to use higher reliability SAS drives and dual redundant power supplies. A host based management utility with remote management provides detailed configuration and status monitoring options.

- ◆ Instant RAID array creation
- Hot swap support

	MV5108	MV5108SR	MV5116	MV5116SR
PCI Host Slot Required	PCI Express 8 or 16 lane (20Gbps)			
Cable Lengths	3 or 7m	3 or 7m	3 or 7m	3 or 7m
Disk Type	SATA II	SAS or SATA II	SATA II	SAS or SATA II
Chassis Power Supply	Single 400W	Dual Redundant 430W	Single 400W	Dual Redundant 430W
Mirror Splitting	Yes	Yes	Yes	Yes
Advanced Array Partitioning	Yes	Yes	Yes	Yes
Task Priority	Yes	Yes	Yes	Yes
Consistency Checks	Yes	Yes	Yes	Yes





1177

HD COMMANDER eSATA

eSATA with Port Multiplier

The HD Commander uses the latest eSATA Port Multiplier technology and it is supplied with a five drive enclosure populated with the latest SATA II high performance disk drives; a four port eSATA PCI-e or PIC-x Host Adapter for workstations or a two port eSATA Express Card 34 for laptops. Each eSATA port supports the Port Multiplier feature which translates to future expansion of up to 20 hard disk drives with the four port Host Adapter or 10 hard drives with the two port Express Card 34. Each eSATA port is rated for an amazing 240MB/s data rate, this means the HD Commander can handle any project you throw at it; from DV, DVCPRO HD, uncompressed SD / HD and Apple's latest ProRes 422.



- ◆ From 1.25TB to 5TB in a five drive removable managed enclosure.
- ◆ Up to 20 drives with the PCI-e Host Adapter or 10 drives with the Express Card 34.
- Port Multiplier capable, each port supporting five drives.
- Up to 235MB/sec bandwidth per port with the PCI-e Host Adapter or 140MB/sec with the Express Card 34.
- Four port PCI-e (x8) or PCI-x Host Adapter or Express Card 34 card included, plus a 1-meter eSATA cable.
- Mac and Windows compatible.
- ◆ Final Cut Studio and Premiere Pro certified.

 Operating System managed RAID 0 for performance, RAID 1 for mirror protection, Span and JBOD configurations.

	With PCI Express Controller Card	With PCI-X Controller Card
1.25TB	(B&H # DUHDCE1250) 1749.95	(B&H # DUDUHDCX1250) 1987.95
1.6TB	(B&H # DUHDCE1600) 2183.95	(B&H # DUHDCX1600) 2183.95
2.5TB	(B&H # DUHDCE2500) 2279.95	
3.75TB	(B&H # DUHDCE3750) 2999.95	(B&H # DUHDCX3750) 3864.95
5TB	(B&H # DUHDCE5000) 5578.50	(B&H # DUHDCX5000) 5578.50



DUO QUAD & QUAD

SATA RAID Protected Storage

The Quad and Duo Quad are fully loaded with the latest RAID 6 double disk drive protection feature in addition to the traditional RAID 0, 1, 3, 5, and JBOD capabilities. With capacities up to 8TB for the Duo Quad and 4TB for the Quad, the stylish units are bundled with a PCI-e or PCI-x host side RAID controller complete with cables and drives - everything necessary to be incorporated into a Mac or a Windows PC for video editing, rendering, and creation applications. These units are ideal for serious video professionals where a budget-minded price does not compromise performance, reliability and features.

- Mac and Windows compatible.
- Works with Final Cut Pro, Premiere and all other major creation tools.
- ◆ Multiple uncompressed SD streams.
- ◆ PCI-express x8 or PCI-x RAID Controller.
- ◆ 4 hot swappable SATA II drives.
- RAID 0 for speed, RAID 1 for maximum protection.
- RAID 3 or 5 for efficient speed and protection.
- RAID 6 for ultimate double disk protection.
- Enclosure Management for fan and temperature.

- Hot Spares.
- Web base RAID Management with remote capabilities.
- ◆ Automatic E-mail event notification.
- Instant availability with background RAID format.

	Quad-e Quad	Quad-x Quad	Duo Quad-e Quad	Duo Quad-x Quad
1TB	(DUQE1000) 2149.95	(DUQX1000) 2392.95		
1.28TB	(DUQE1280) 2558.50	(DUQX1280) 2558.50		
2TB	(DUQE2000) 2839.95	(DUQX2000) 3298.50	(DUDQE2000) 3999.95	(DUDQX2000) 4398.50
2.56TB			(DUDQE2560) 4499.95	(DUDQX2560) 5198.50
3TB	(DUQE3000) 3399.95	(DUQX3000) 3998.50		
4TB	(DUQE4000) 4998.50	(DUQX4000) 4998.50	(DUDQE4000) 6298.50	(DUDQX4000) 6298.50
6TB			(DUDQE6000) 6998.50	(DUDQX6000) 6998.50
8TB				(DUDQX8000) 7997.95



KEYBOARDS & STORAGE DULCE

The Fastest RAID 3/5/6 Protected Storage

The PRO DQ is the fastest RAID protected storage you can have. The proven RAID engine of Dulce's original Duo Quad had been retuned to provide more horsepower than ever. In RAID 3 or 5 protected mode, the PRO DQ can pump out over 570 MB/s sustained. Want to run faster? Configure the RAID engine to RAID 0 mode and the PRO DQ will scream at over 660 MB/s. The truth is, disk drives will fail, and they will fail at just the worst time. Don't give it a chance to ruin your day. RAID 3, 5 or 6 protection schemes are the most cost-efficient approach to insuring workflow continuation. Should a drive fail during your last render before your final tape out, don't sweat it, the hardware RAID protection will keep your workflow going even with one or more drives down.



PRO DQ

1179

- Final Cut Studio, Premiere and other popular editor certified.
- ProRes 422, DV, DVCPRO HD, uncompressed SD/HD, 2K Film formats.
- ◆ Multiple real-time streams.
- ◆ RAID 1/3/5/6 protection against drive failures.
- ◆ PCI-e controller supplied.
- Eight high performance 3Gb/s SATA disk drives.
- Up to 8TB of useable storage in RAID 0, 7 TB in RAID 3/5.
- GUI RAID Console management and e-mail event notification.
- ◆ Enclosure management.
- ◆ Quiet and effective cooling fans.
- Expandable with Dulce's PRO Switch expander.
- ◆ Industry's longest 42 month warranty.
- Mac and Windows Compatible.

2TB PRO DQ Hard Drive Array	6TB PRO DQ Hard Drive Array
(Mfr # 960-0200-0 • B&H # DUPDQE2000)	(Mfr # 960-0600-0 • B&H # DUPDQE6000)6499.95
2.56TB PRO DQ Hard Drive Array	8TB PRO DQ Hard Drive Array
(Mfr # 960-0256-0 • B&H # DUPDQE2560)	(Mfr # 960-0800-0 • B&H # DUPDQE8000)6999.95
4TB PRO DQ Hard Drive Array	8TB PRO DQ with PRO EX Expander Switch
(Mfr # 960-0400-0 • B&H # DUPDQE4000)5999.95	(Mfr # 963-9601-5 • B&H # DUPDQE8000PX)9799.95

SPARE DRIVES

For Quad, Duo Quad, PRO DQ, and HD Commander

Spare Hard Drives from Dulce Systems are compatible with the Quad, Duo Quad, PRO DQ, and HD Commander arrays by Dulce Systems. The drives ship with or without an installation tray. Having a spare drive available reduces downtime in the event of an individual drive failure. Simply remove the bad drive, insert the new one and let your array automatically rebuild your data. The drives are hot swappable, allowing you to replace a bad drive without having to power down your array. This eliminates the downtime that is often associated with hardware upgrades or replacement, making your job as a system administrator easier.

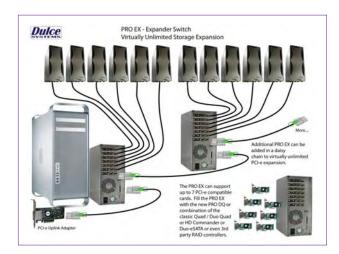


	Spare Drive Without Tray	Spare Drive With Tray
250GB	(B&H # DUHD250) 154.95	(B&H # DUHDT250) 179.95
320GB	(B&H # DUHD320) 194.95	(B&H # DUHDT320) 223.95
500GB	(B&H # DUHD500) 343.95	(B&H # DUHDT500) 339.95
750GB	(B&H # DUHD750) 604.95	(B&H # DUHDT750) 624.95
1TB	(B&H # DUHD1000) 866.95	(B&H # DUHDT1000) 869.95



PRO EX PCI-e Expander Switch

The PRO EX is a PCI-e bus expander and switch combination that is scalable, flexible and very fast when coupled with the Dulce PRO DQ RAID storage system. The PRO EX provides 7 PCI-e expansion slots for scalability. All 7 slots will accommodate a 1/2 length (174 mm) full height PCI-e card with x8 physical slot size or smaller. If additional PCI-e slots are needed, the PRO EX can be daisy chained to one or more PRO EX's for additional PCI-e expansion. This provides a virtually unlimited storage expansion pay-as-you-grow capability. Any combination of Dulce's PCI-e storage controllers and adapters can be used in the PRO EX, including the SATA RAID PRO DQ, Duo Quad, Quad, eSATA HD Commander and Duo-eSATA products. Third party PCI-e cards can be added too. The PRO EX flexibility provides for future proofing of your existing and new storage as well as other PCI-e investments. The PRO EX high performance is attained by the x8 PCI-e speed throughout the PRO EX architecture. An x8 speed



uplink port and the x8 speed PCI-e Uplink Host Adapter ensures the highest data bandwidth to and from the host computer. Three slots are x8 speed and four slots are x4 speeds which provides for an even distribution of data flow. The x8 speed slots are rated for 20 Gb/s or about 2 GB/s of data bandwidth; the x4 speed slots translate to a still very high 1GB/s data rate. With the PRO EX populated with three of the Dulce PRO DQ RAID storage systems, a total of 24 drives striped in RAID 5 protected mode achieved a breathtaking 1369 MB/sec data rate speed as measured on an Apple Mac Pro. The PRO EX is housed in an attractive, shiny, smooth, glossy titanium looking case, efficiently sized in a small form factor footprint tower configuration or with an optional 3U rack mount kit. If your existing storage demand is outpacing slots available in your workstation, the PRO EX is the solution.

- Mac and PC compatibe.
- Seven PCI-e x8 physical slots. Three x8 speed rated, four x4 speed rated.
- Uplink Host Adapter provides up to x8 speed (20 Gb/sec) uplink speed.
- Robust and secure 3-meter Uplink Cable.
- Triple cooling fans.
- Enclosure management monitors fans and temperature.
- PCI-e power management with remote power on/off.
- ◆ PCI-e slot link status indicators.
- PCI-e bridge and switch operation is transparent, no drivers or utility needed.

CONTROLLER CARDS

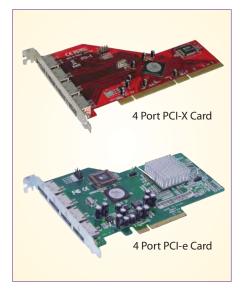
4-Lane PCI-X Mini-SAS Controller Card for Dulce Quad

The 4-Lane PCI-X Mini-SAS Controller Card for Dulce Quad from Dulce Systems is a controller card for the Quad array. It features a PCI-X interface for easy installation in desktop computers. The card can host up to 4 drives. (*Mfr* # 550-1110-0 • *B*&H # DUPCIXC4D)......**819.95**

4-Lane PCI Express Mini-SAS Controller Card for Dulce Quad

The 4-Lane PCI Express Mini-SAS Controller Card for Dulce Quad from Dulce Systems is a controller card for the Quad array. It features a PCI Express interface for easy installation in desktop computers. The card can host up to 4 drives.

(*Mfr* # 550-1210-0 • *B*&*H* # *DUCPCIEC4D*)**819.95**



8-Lane PCI-X Mini-SAS Controller Card for Dulce Quad

The 8-Lane PCI-X Mini-SAS Controller Card for Dulce Quad from Dulce Systems is a controller card for the Quad array. It features a PCI-X interface for easy installation in desktop computers. The card can host up to 8 drives. (*Mfr* # 550-1120-0+*B*&*H* # *DUPCIXC8D*)**1199.95**

8-Lane PCI Express Mini-SAS Controller Card for Dulce Quad

The 8-Lane PCI Express Mini-SAS Controller Card for Dulce Quad from Dulce Systems is a controller card for the Quad array. It features a PCI Express interface for easy installation in desktop computers. The card can host up to 8 drives.

(Mfr # 550-1220-0 • B&H # DUPCIEC8D)......**1199.95**



KEYBOARDS & STORAGE DULCE

PRO RX

1181

Super Fast Rackmount RAID Storage

The super fast PRO RX uses the latest PCI-express Extender technology running at 20Gb/s to extend the computer's PCI-express bus to the PRO RX enclosure - this enables an impressive set of data rates breaking all records. Like the PRO FC and PRO DI, the PRO RX, supports RAID 0, 1, 5 and 6 modes, it is Mac and PC compatible, and it works with most popular video editing and creation tools. It supports the



Instant Ready feature eliminating the long initial format time, and features Ethernet management capabilities with email notification. In the performance RAID 0 stripe mode the PRO RX measures 800MB+/sec, in the drive redundant RAID 5



mode the PRO RX measures 750MB+/sec, even with the double disk redundant RAID 6 mode the PRO RX delivers over 700MB/sec. The PRO RX comes in a 12 or 16 drive configuration with a maximum capacity of 16TB.

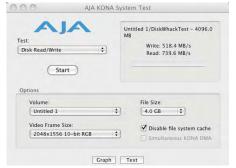
FEATURES

- ◆ A 12 or 16 drive rackmount storage system utilizes the latest PClexpress Extender technology to provide Super Fast RAID protected performance.
- The 20Gb/s PCI-express Host Extender extends the computer's high speed PCIexpress bus to the PRO RX rackmount enclosure.
- The proven Super Fast RAID engine protects your valuable data with all of the latest RAID drive redundancy features.
- The answer to your low cost, high performance, protected bulk storage needs.
 Should more storage be required, additional PRO RXes can be added using the PRO EX PCI-e Expander.
- ◆ 20Gb/s PCI-express Extender technology; super fast, energy efficient, low heat.
- ◆ Up to 12 or 16 hot swappable drive bays.
- ♦ 8, 12, 16 drive models available.
- Super fast hardware RAID Controller housed inside enclosure for superior cooling.
- Removable fans, optional hot swappable power supply.

- ◆ RAID 0, 1, 3, 5, 6, JBOD supported.
- ◆ Mac and PC Compatible.
- ◆ Host Extender and Cable Included.
- PRO EX PCI-express Expander Compatible.
- Final Cut Studio, Premiere and other popular editor certified.
- ProRes 422, DV, DVCPRO HD, HDV, uncompressed SD/HD, 2K Film formats.
- ◆ Multiple real-time streams.
- ♦ 3u Rackmount.
- Power on/off controlled by host.
- High performance 3Gb/s SATA hot swappable disk modules.
- Up to 16TB of useable storage in RAID 0, 15 TB in RAID 3/5.
- ◆ GUI RAID Console management.
- E-mail event notification.
- Enclosure management.
- ◆ 42 months warranty. Industry's longest.

PRO RX Performance





AJA KONA System Test — Based on 16 x 1TB drives, numbers could vary with different size drives.

Disk to Test:	Dulce PRO R	x	•	F	lun Test
Disk Read Speed Re	sults		Disk Write Speed Re	sults	
Disk Read Data R	ate in MB/s	820.9	Disk Write Data R	ate in MB/s	854.4
8 Bit YUV 4:2:2 Fran	me Rates		10 Bit RGB 4:4:4 Fr	ame Rates	
	Disk Read	Disk Write		Disk Read	Disk Write
HDTV 1080 fps	207	216	HDTV 1080 fps	103	108
HDTV 720 fps	467	486	HDTV 720 fps	233	243
NTSC fps	1229	1280	NTSC fps	614	640
PAL fps	1037	1080	PAL fps	518	540
10 Bit YUV 4:2:2 Fr	ame Rates		12 Bit RGB 4:4:4 Fr	ime Rates	
	Disk Read	Disk Write		Disk Read	Disk Write
HDTV 1080 fps	155	162	HDTV 1080 fps	90	94
HDTV 720 fps	350	364	HDTV 720 fps	204	212
NTSC fps	922	960	NTSC fps	538	560
PAL fps	778	810	PAL fps	454	472

Blackmagic Disk Speed Test — 16TB RAID 0 PCIe x8.



PRO DI • PRO FC

4Gb Fibre Channel RAID Storage

The PRO FC and PRO DI are 16 drive based products that support RAID 0, 1, 5 and 6 modes, are Mac and PC compatible, and work with Apple's Final Cut Studio, Adobe's Premiere Pro and other popular video editing and creation tools. The PRO DI and PRO FC each employ a dual channel 4Gb Fibre Channel high performance RAID controller, offering a 550MB/sec data rate. They also support the Instant Ready feature eliminating the long initial format time. Additionally, they feature



Ethernet management capabilities with email notification plus a host of other great features.

The super sneaker net-able PRO DI features the DI Pack, which is a small removable and portable package with sixteen 2.5" laptop disk drives. The DI Pack loaded with data can be transported to another location and installed into another PRO DI - this enables moving large amount of data conveniently from location to location without breaking your back. The PRO DI is expandable to 3 additional PRO DI JBODs and is also SAN Ready. Maximum capacity for the PRO DI is 5.12TB



in RAID 0, 4.8TB in RAID 5 or 4.4TB in RAID 6.

The rackmountable PRO FC features a built-in expansion port that enables a very cost effective expansion to 3 additional PRO FC JBOD enclosures via daisy chain, resulting with a total of 64 drives per RAID controller. The PRO FC is ideal for machine room and SAN shared storage environments with capacities of up to 16TB.

They Both Feature

- ◆ Dual port 4Gb Fibre Channel Interface.
- ◆ RAID 0, 1, 5, 6 supported.
- ◆ Mac and PC Compatible.
- ◆ RISC based hardware RAID Controller with embedded RAID 6 XOR engine.
- ◆ SAN ready for shared storage environment.
- ◆ Instant Ready, no long format required.
- ◆ Final Cut Studio, Premiere Pro, Media Composer compatible.

Pro DI

- Up to 8TB in a small portable modular DI Pack.
- Optional rackmount tray accommodates two PRO DI in 4u.
- Cost effective built-in SAS Expander. Daisy chain 3 additional PRO DI JBODs.
- Removable fans, hot swappable power supplies.

- ProRes 422, DV, DVCPRO HD, HDV, uncompressed SD/HD, 2k film formats.
- ◆ Multiple read-time steams.
- Built-in Ethernet management port.
- ◆ Java base GUI RAID Console management.
- E-mail event notification.
- ◆ Enclosure management.
- Industry's longest 42 month warranty.

Pro FC

- 3u rackmount chassis with 16 hot swappable drive bays.
- Cost effective built-in expansion. Daisy chain 3 PRO FXs for a total of 64 drives.
- Super fast Hardware RAID controller supporting RAID 0, 1, 5, 6, JBOD.
- Pre-loaded with hot swappable 7200 RPM SATA II 3Gb/s high performance disk drives.
- Optional redundant hot swappable power supplies.

AJA	PR	O FC/DiskWhackTest - 4096.0 M
est: Disk Read/Write	•	Write: 334.7 MB/s Read: 378.5 MB/s
Start		
Options		
Options Volume:		File Size:
Options	•	File Size:
Options Volume:	:	

AJA KONA System Test — Two RAID 0 (eight 1TB drive each) dual FC ports, Mac stripe on Mac Pro.

Disk to Test:	PRO FC		\$	5	tun Test
Disk Read Speed Re	sults		Disk Write Speed Re	esults	
Disk Read Data R	ate in MB/s	367.7	Disk Write Data F	tate in MB/s	329.3
8 Bit YUV 4:2:2 Fra	me Rates		10 Bit RGB 4:4:4 Fr	ame Rates	
	Disk Read	Disk Write		Disk Read	Disk Write
HDTV 1080 fps	92	83	HDTV 1080 fps	46	41
HDTV 720 fps	209	187	HDTV 720 fps	104	93
NTSC fps	\$50	493	NTSC fps	275	246
PAL fps	464	416	PAL fps	232	208
10 Bit YUV 4:2:2 Fr	ame Rates		12 Bit RGB 4:4:4 Fr	ame Rates	
	Disk Read	Disk Write		Disk Read	Disk Write
HDTV 1080 fps	69	62	HDTV 1080 fps	40	36
HDTV 720 fps	156	140	HDTV 720 fps	91	81
NTSC fps	413	370	NTSC fps	241	215
PAL fps	348	312	PAL fps	203	182

Blackmagic Disk Speed Test — RAID 5 (sixteen 1TB), 1 FC Port.



DUO-FIREWIRE • PRO DUO-FIREWIRE

FireWire External Hard Drive Arrays

Dulce Systems' PRO Duo-FireWire and Duo-FireWire are compatible with Apple's desktop/notebook computers and Windows compatible machines. Equipped with two 3Gb/s rated hard drives and the fastest FireWire 800 interface, they can easily keep up with the most demanding video projects. Both the Duo-FireWire and PRO Duo-FireWire are fully loaded with all the RAID features: RAID 0 striping for speed; RAID 1 mirroring for redundancy; Span for simplicity and JBOD for flexibility. With 80MB/s data rate, the



1183

Duo-FireWire and PRO Duo-FireWire are fully capable of multiple video and audio tracks playing back in realtime, support all the popular video resolutions including Apple's ProRes 422, DVCPRO HD and others. These interface are also compatible with USB 2.0, FireWire 400, and USB 1.0, 1.1.

- ♦ 500GB to 2TB capacity
- ◆ Two 3Gb High Performance SATA disk drives.
- Mac and Windows Compatible.
- Multiple realtime streams.

	Duo-FireWire	Pro Duo-FireWire
500GB	(B&H # DUDF500) 329.95	(B&H # DUPDF500) 342.95
640GB	(B&H # DUDF640) 478.95	_
1TB	(B&H # DUDF1000) 658.95	(B&H # DUPDF1000) 474.95
1.5TB	(B&H # DUDF1500) 1058.95	(B&H # DUPDF1500) 718.95
2TB	(B&H # DUDF2000) 1498.95	(B&H # DUPDF2000) 999.95

- Final Cut Studio, Premiere and other popular editor certified.
- ◆ Quiet and effective cooling fan.
- ◆ Lock slot for theft protection.
- ◆ Industry's longest 36 month warranty.
- Includes: Power Adapter, 9-Pin to 9-Pin FireWire-800 Cable, 9-Pin to 6-Pin FireWire-400 Cable, and a USB 2.0 Cable.

DUO-eSATA • PRO DUO-eSATA



- ♦ 500GB to 2TB capacity
- ◆ Mac and Windows Compatible.
- ◆ Two 3Gb High Performance SATA disk drives.
- Multiple realtime streams.
- Final Cut Studio, Premiere and other popular editor certified.
- Quiet and effective cooling fan.
- Lock slot for theft protection.
- Industry's longest 36 month warranty.

SATA External Hard Drive Arrays

The Duo-eSATA and PRO Duo-eSATA house two of the latest SATA disk drives. Each is rated for a speedy 3Gb/s transfer rate, that translates to 140MB/s data rate through the two eSATA ports which means your workflow will increase like never before. If your workflow requires more realtime playback and higher data rates than FireWire 800 can provide, the Duo-eSATA drives are your solution. Need more multiple playback layers of ProRes 422, DVCPRO HD, HDV or DV? The Duo-eSATA is the right choice.

◆ Includes: Power Adapter, PCI Express eSATA Controller Card, 2 x eSATA Cables

	Duo-eSATA	Pro Duo-eSATA
500GB	(B&H # DUDE500) 329.95	(B&H # DUPDE250GB) 342.95
640GB	(B&H # DUDE640) 478.95	_
1TB	(B&H # DUDE1000) 658.95	(B&H # DUPDE500GB) 474.95
1.5TB	(B&H # DUDE1500) 1058.95	(B&H # DUPDE750GB) 718.95
2TB	(B&H # DUDE2000) 1498.95	(B&H # DUPDE1000GB) 999.95





FIRMTEK

SERITEK/5PM

1184

Five-Bay, Hot-Swap, SATA PM Enclosure



Incorporating the latest storage technologies, the SeriTek/5PM SATA enclosure with Port Multiplier technology, delivers unprecedented performance of up to 3Gbps with cross-platform Macintosh and PC Support. This breakthrough solution houses up to 5 hot-swappable drives, each with transfer rates as high as 3 gigabits per second, delivering potential aggregate hard drive performance beyond 220 megabytes per second with just one cable. When configured with three additional SeriTek/5PM enclosures (for a total of 20 drives), RAID 0 performance can exceed 700 megabytes per second. The remarkable performance and capacity of the SeriTek/5PM supports uncompressed streaming video, photography, storage and archiving, as well as other activities involving large media or image files. Hot-swap compatibility also makes it easy for users to move entire drives and arrays between any FirmTekequipped systems, or into secure storage, in seconds.

In addition to its state-of-the-art support of Port Multiplication, the SeriTek/5PM delivers features such as a front-panel power switch that carries a multi-second delay to prevent accidental power-down.

The SeriTek/5PM is made of attractive aluminum and includes a unique temperature management system featuring two ultra-quite fans that have three user-selectable speeds, a fault LED and a mutable temperature and fan failure alarm. For further protection, FirmTek employs a server-class power supply as standard equipment.

FEATURES

- Compatible with virtually every external SATA PM host adapter on the market and supports data transfer rates of up to 300MBytes/sec or 3 Gbits/sec per drive. The SeriTek/5PM easily supports the most demanding applications like uncompressed high-definition digital video creation and editing, computer animation, and digital photography.
- The SeriTek/5PM is compatible with most Port Multiplier capable eSATA controller cards, as well as all SATA 3.5["] hard drives.
- Port Multiplication is supported by a Mac running OS X 10.4 or later with a SATA PM host adapter installed. The enclosure is system independent, and will work with any Mac or Windows PC with a controller that correctly follows the eSATA II specifications for Port Multiplication.
- ◆ To further enhance flexibility, Port Multiplication frees users to use multiple cards and multiple enclosures to create ideal RAID solutions in both size and performance. Users may opt for multiple cards, multiple enclosures or both to attain the solution that best meets their needs.

Five Drives Running on a Single Cable

The remarkable technology included in the SeriTek/5PM is support for port multiplication. Driven by new controller cards supporting the eSATA II specification, this innovation allows each physical SATA port to drive multiple devices in enclosures like the SeriTek/5PM. Port multiplier technology optimizes up to 5 drives per enclosure, delivering much greater throughput without taxing the computer's processor.

When 20 high performance hard drives are configured in a RAID array (utilizing four SeriTek/5PMs), throughput can exceed 700Mb/sec (depending on the controller card), enabling multiple HD video streams to be streamed directly to disk. Port multiplication also delivers much greater simplicity for standard applications, as a single cable connects the computer with up to five drives. For more advanced applications it dramatically increases on-hand high-performance storage. With up to 20 RAID-configured drives connected simultaneously, accessible storage limits can be effectively eliminated for all but the most demanding applications.

Heat Management System

Heat Management System provides superior airflow throughout the chassis, by using a unique system of cooling vents, holes in the tray handles and perforations in each tray. It also utilizes two whisper quiet hard drive fans with user selectable, 3-speed (Low/Med/High) fan control. The only 5-Bay SATA PM enclosure that provides users with the flexibility of push button fan speed control, this ensures cool, reliable operation with any size hard drive and allows users to easily modify the cooling and acoustical characteristics of the enclosure. In the unlikely event a fan fails or temperatures climb too high, the enclosure warning LEDs will turn red and a "mute-able" audible alert will warn the user. All of these controls are placed on the front of the enclosure for easy user access. It costs more to build the SeriTek/5PM enclosure with all of these user friendly features, but this is the type of quality and detailed design that FirmTek customers expect from an industry leader.



FIRMTEK

SERITEK/2EN2

- Attractive anodized extruded aluminum design with a professional appearance with maximum rigidity and heat dissipation.
- Innovative backplane design with no internal cabling
- Five hot-swappable 3.5" Serial ATA drive bay enclosure with removable trays. Only 3 steps to integrate each hard drive.
- Provides physical lock and key security for each hard drive. Also prevents accidental removal during operation
- Kensington Security Slot to secure chassis
- Power and activity LEDs for each hard drive
- Supports high-performance storage data transfer up to 3Gbps (300MB/sec) per drive
- ◆ Faster than USB 2.0 and FireWire 800
- Additional trays are available separately for virtually unlimited storage possibilities
- Front-panel power switch with multi-second delay to prevent accidental power-down
- Surpasses rotational vibration and heat dissipation requirements of high RPM drives
- Fully compatible with operating system and host adapter based RAID solutions. RAID arrays can span across multiple enclosures
- Supports most SATA PM compatible host adapters, operating systems, and softwarebased RAID or JBOD configurations
- SATA II compliant; auto-negotiation between the latest 3Gb/s and legacy 1.5Gb/s Serial ATA drives
- Includes eSATA external connector and one fully-shielded external eSATA cable
- Hot-swap drive trays are interchangeable with other FirmTek enclosures
- Compact and portable, easy to transport

SeriTek/5PM with SeriTek/2SE2-E PCI Express Host Adapter (Mfr # SATA-5PM-2SE2 • B&H # FIST5PM2SE2)......CALL

SeriTek/5PM with SeriTek/2SM2 ExpressCard/34 Host Adapter (Mfr # SATA-5PM-2SM2 • B&H # FIST5PM2SM2)CALL

SeriTek/2eEN4 with SeriTek/1eVE4 4-Port PCI-X Controller Card (Mfr # SATA-2EVEN4 · B&H # FIST2EVEN4)......CALL

SeriTek/2EN2 with SeriTek/1eVE4 PCI -X Host Adapter (Mfr # SERITEK/2EVEN2-1 • B&H # FIST2EVEN21Z)......CALL

Dual-Bay Hot-Swap External Serial ATA Enclosure

This cutting-edge two-bay Serial ATA (SATA) external hard drive enclosure provides versatile hot-swap capabilities with virtually unlimited storage possibilities in a small form-factor package that sits neatly beside a notebook or desktop. SeriTek/2EN2 offers the latest eSATA shielded connectors and a whisper-quiet fan with three user-selectable speed settings.

SeriTek/2EN2 extends Serial ATA's storage capabilities outside of the computer chassis with flexibility on par with USB or FireWire but with much higher 3.0Gbps transfer rates. Serial ATA Hard drives can easily be swapped in and out of the SeriTek/2EN2 enclosure within seconds.

- Brushed anodized extruded aluminum case for maximum rigidity and heat dissipation
- Power and activity LEDs for each hard drive
- High-performance storage data transfer up to 3.0Gbps (300MB/sec) per drive
- Faster than USB 2.0 and FireWire 800
- Dual hot-swappable 3.5" Serial ATA drive bay enclosure with removable trays
- Additional trays are available separately for virtually unlimited storage possibilities
- Built-in quiet exhaust fan with three user-selectable speeds for cool-running hard drives



- Provides physical lock and key security
- Surpasses rotational vibration and heat dissipation requirements of high RPM drives
- Compatible with operating system and host adapter based RAID solutions
- RAID arrays can span across multiple enclosures
- Works with Mac and PCs with shielded serial ATA ports running OS 8/9, OS X, Windows 98/SE/ME/2000/XP/2003 and Linux
- External power adapter offloads computer's power supply

SERITEK/2EN4

Four-Bay Hot-Swap External eSATA Serial ATA Enclosure



A four-bay hot-swap enclosure that features the latest Serial ATA storage technologies and unprecedented performance with cross-platform Mac and PC support. Utilizing an innovative backplane design with no internal cabling, the SeriTek/2eEN4 supports all Serial ATA hard drives including those with 3.0Gbps transfer rates as well as original 1.5Gbps Serial ATA hard drives.

The SeriTek/2eEN4 chassis features an attractive design made from brushed & anodized extruded aluminum to keep weight at a minimum while maintaining structural rigidity. It includes a built-in server-class universal power supply and offers a special Heat Management System to ensure hard drives are kept cool and reliable

while keeping noise to a minimum. The Heat Management System provides superior airflow throughout the chassis and utilizes whisper quiet fans and special warning indicators. In the unlikely event a fan fails or temperatures become too extreme, fan or temperature LEDs will light and a "mute-able" audible alert will warn the user.

Compatible with almost any external Serial ATA host adapter on the market and supporting data transfer rates of up to 300MBytes/sec or 3.0Gbits/sec per drive, the SeriTek/2eEN4 supports applications like uncompressed high-definition digital video editing and computer animation.





G-TECH G-SPEED

1186

4Gbit Fibre Channel and U320 SCSI Storage Solutions

G-SPEED is the perfect solution for multi-stream, multi-user SD and uncompressed HD work flows - including real-time playback of 2K DPX sequences. G-SPEED features 4Gbit Fibre Channel connectivity and is available in a compact desktop enclosure with 6 Hitachi SATAII drives (G-SPEED) and dual channel, 2U or 3U rackmount enclosures (G-SPEED XL12 and XL16) with 12 or 16 Hitachi SATAII drives.

G-SPEED can be configured as a JBOD, RAID 0, 1, 3, 5 or

RAID 6. This flexibility enables the system to be tuned to the required level of performance and fault-tolerance necessary to fully support your application. G-SPEED's built-in Web GUI is used to configure and monitor the status of the system including power supply voltage, fan RPM and the temperature of the RAID controller and hard drives.

FEATURES

- Cost-effective, 4Gbit Fibre Channel or Ultra320 SCSI RAID storage solutions for high-end content creation applications.
 When configured in RAID 6 mode, G-SPEED protects your valuable content even if two drives fail - the ultimate in peace of mind.
- Easily supports multi-stream SD, 10-bit, 1080/60i HD and 2K Film workflows
- Available in a compact desktop enclosure with 6 drives or dual channel 2U rackmount enclosure (XL12) with up to 12 drives, and 3U (XL16) with up to 16 drives.
- Hot-swappable disk drive modules with useable storage capacities up to 6TB (G-SPEED, 12TB (XL12) and 16TB (XL 16)
- G-SPEED can easily be configured as a RAID 0, 1, 3, 5 or RAID 6. This enables the system to be tuned to the required level of performance and fault-tolerance necessary to support your application. Can also be configured in JBOD (Just-a-Bunch-of Disks) mode for use with digital audio workstations.
- ♦ G-SPEED has a built-in Web GUI that is accessed via their Ethernet port. This simple GUI is used to configure the RAID level and monitor the status of the system. The GUI monitors all aspects of the system including power supply voltage, fan RPM and the temperature of the RAID controller & hard drives. In the event of a problem, G-SPEED will send an email message to up to four recipients.

- Fibre Channel version features 4GBit connectivity and utilizes Small Form-Factor Pluggable (SFP) LC optical transceivers. The system connects to any Mac or PC workstation using thin optical cabling and is backwards compatible with existing 1& 2GBit Fibre Channel infrastructures.
- The SCSI version of G-SPEED features Ultra320 connectivity and supports daisychaining of additional units.
- The disk drive and fan modules in G-SPEED are field upgradeable and hot-swappable.
- ♦ G-SPEED can also be configured and monitored via the system's front panel LCD
- Supports the latest professional video editing equipment including AJA, Media Composer and Blackmagic Design's Decklink products.
- Backed by a 3-Year warranty and unlimited free technical support

Deskmount

G-SPEED 1.5TB 6-Disk Ultra320 SCSI RAID (Mfr # 917001-01 • B&H # GTGSS1500)	Call
G-SPEED 3TB 6-Disk Ultra320 SCSI RAID (Mfr # 917002-01 • B&H # GTGSS3000)	Call
G-SPEED 960GB 6-Disk 4Gb/s Fibre-Channel RAID (Mfr # 91500001 • B&H # GTGSFC960)	Call
G-SPEED 1.5TB 6-Disk 4Gb/s Fibre-Channel RAID (Mfr # 915001-01 • B&H # GTGSFC1500)	Call
G-SPEED 3TB 6-Disk 4Gb/s Fibre-Channel RAID (Mfr # 915002-01 • B&H # GTGSFC3000)	Call
G-SPEED 4.5TB 6-Disk 4Gb/s Fibre-Channel RAID (Mfr # 915003-01 • B&H # GTGSFC4500)	Call

Rackmount

3TB G-SPEED XL 12-Disk 4Gb/s Fibre-Channel RAID Array (Mfr # 922002-01 · B&H # GTGSS3)6TB G-SPEED XL 12-Disk 4Gb/s Fibre-Channel RAID Array (Mfr # 922004-01 · B&H # GTGSS6)9TB G-SPEED XL 12-Disk 4Gb/s Fibre-Channel RAID Array (Mfr # 922005-01 · B&H # GTGSS6)4TB G-SPEED XL 16-Disk 4Gb/s Fibre-Channel RAID Array (Mfr # 918002-02 · B&H # GTGSS4)8TB G-SPEED XL 16-Disk 4Gb/s Fibre-Channel RAID Array (Mfr # 918004-02 · B&H # GTGSS8)Call8TB G-SPEED XL 16-Disk 4Gb/s Fibre-Channel RAID Array (Mfr # 918004-02 · B&H # GTGSS8)Call12TB G-SPEED XL 16-Disk 4Gb/s Fibre-Channel RAID Array (Mfr # 918005-02 · B&H # GTGSS12)Call16TB G-SPEED XL 16-Disk 4Gb/s Fibre-Channel RAID Array (Mfr # 918005-02 · B&H # GTGSS12)Call



KEYBOARDS & STORAGE G-TECH

G-SPEED ES

1187

High-Speed eSATA Storage Solutions for SD/HD Editing

Compact and stylish aluminum enclosure specifically designed for professional content creation applications, G-SPEED eS features a high-speed 3Gbit/sec eSATA interface and provides RAID 5 data protection when used in conjunction with the

optional G-Tech PCI Express (PCIe) RAID controller. G-SPEED eS supports multi-stream video editing workflows on Mac Pro and Windows workstations at an unprecedented low cost per TB. Supports multi-stream SD, Apple ProRes 422 and HD video workflows. Storage capacities up to 16 TB using the G-Tech PCIe RAID controller.

FEATURES

- When used with the G-Tech RAID controller, G-SPEED eS can easily be configured as a RAID 0, 1, 5, 10 or as a JBOD. This flexibility enables the system to be tuned to the required level of performance and fault-tolerance necessary to support your application. G-SPEED eS can also be set up as a software RAID or JBOD when used with third party port multiplier aware eSATA host adapters.
- Windows 2000 / XP are 32 bit operating systems that don't allow logical disks to be greater than 2TB. The G-SPEED eS RAID Controller breaks this barrier with Variable Sector Size (VSS) technology. VSS increases the sector size presented to the operating system making it possible to now have logical disks of up to 16TB. No more breaking large disk volumes into multiple 2TB volumes!
- When used with the G-Tech PCle RAID controller, a single 4-drive G-SPEED eS unit supports multi-stream DV, HDV, DVCPRO HD, ProRes 422 & uncompressed SD playback in RAID 0 or RAID 5 mode and single-stream 8-bit, 1080/60i HD playback in RAID 0 mode.
- ◆ Two G-SPEED eS units and the G-Tech PCIe RAID controller support all of the above plus 10-bit, 1080i/60 HD playback in RAID 0 or RAID 5 mode.
- As many as four G-SPEED eS enclosures can be attached to the G-Tech RAID controller to support up to 16TB storage with speeds in excess of 600MB/sec!
- The disk drive and fan modules are field upgradeable and hot-swappable.

- ◆ G-SPEED eS has a built-in Web GUI that is accessed via any local internet browser. This simple GUI is used to configure and monitor the RAID system. Many aspects of the system are monitored, including power supply voltage, Fan RPM and the temperature of the RAID controller and hard drives. In the event of a problem, the G-SPEED eS can send an email message to up to four recipients.
- ♦ G-SPEED eS features a compact aluminum desktop enclosure with 4 lockable SATA II drive modules, each with up to 32 MB of cache.
- Supports the latest and greatest professional video editing systems from AJA, Avid, Blackmagic Design and more.
- Backed by a 3-Year factory warranty and unlimited free technical support

1 TB G-SPEED eS eSATA RAID (Mfr # 921001-01 • B&H # GTGSED1000)	CALL
2 TB G-SPEED eS eSATA RAID (Mfr # 921002-01 • B&H # GTGSED2000)	CALL
1TB G-SPEED eS eSATA RAID with eSATA PCIe Host Adapter (Mfr # 921001-02 • B&H # GTGSED1000P)	CALL
2 TB G-SPEED eS eSATA RAID with eSATA PCIe Host Adapter (Mfr # 921002-02 • B&H # GTGSED2000P)	CALL
3TB G-SPEED eS eSATA RAID (Mfr # 921003-01 • B&H # GTGSED3000)	CALL
3TB G-SPEED eS eSATA RAID with eSATA PCIe Host Adapter (<i>Mfr # 921003-02 • B&H # GTGSED3000P</i>)	CALL
4TB G-SPEED eS eSATA RAID (Mfr # 921004-01 • B&H # GTGSED4000)	CALL
4TB G-SPEED eS eSATA RAID with eSATA PCIe Host Adapter (<i>Mfr # 921004-02 • B&H # GTGSED4000P</i>)	CALL

* Please Note: G-SPEEDeS bundled with PCIe RAID Host Adapter are not compatible with MAC G5 Systems



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S-Technology, Inc. V	Veb RASD Management	1.5			



G-TECH

G-RAID₂

Professional Dual-Drive RAID Storage with Triple Interface

Featuring a storage capacity of 2 TB, a universal triple interface (FireWire 400, FireWire 800 and USB 2.0) and the Hitachi Deskstar 1 TB, 7200 RPM SATA II hard disk drives, G-RAID2 is specifically designed to support multi-stream DV, HDV, DVCPRO HD, uncompressed SD and Apple ProRes 422 video editing workflows. The defacto standard in FireWire storage for content creation, G-RAID₂



allows up to 27 hours of HD video to be stored in its compact all aluminum enclosure. Has an integrated cooling fan for long life and reliable operation, and includes a 2-year warranty.

FEATURES

- Incorporates the latest disk storage technology currently available including two Hitachi 7200 RPM SATA II hard drives each with up to 32MB of cache and the new Oxford 924 bridge chipset. The use of these latest generation components enables G-RAID₂ to offer superior performance and reliability for demanding content creation applications.
- Triple interface design with FireWire 400, FireWire 800 and USB 2.0 connectivity. G-RAID2 is available in storage capacities up to 2TB in a very compact form factor.
- Real-world performance within an application is the most important factor to consider when purchasing a RAID system. G-RAID2 is guaranteed to the support the simultaneous playback of multiple layers of video in realtime in Final Cut Pro, Premiere and Xpress.
- The defacto standard in FireWire storage solutions for professional content creation applications. Supports multi-stream DV, HDV, DVCPro HD, XDCAM HD, ProRes 422 & uncompressed SD workflows
- Integrated cooling fan for long life and reliable operation
- ♦ 3-Year Factory Warranty
- Unique industrial design, compact all aluminum enclosure
- Easy to set-up, G-RAID₂ appears to any Mac or PC as a single, big and fast disk drive. Ready right out of the box for use with Mac OS X, a simple reformat is all it takes to ready G-RAID₂ for use with Windows systems.

G-Raid₂ 500GB 2-Disk External Hard Drive Array (Mfr # 907205-01 · B&H # GTGR2500)Call G-Raid₂ 1TB 2-Disk External Hard Drive Array (Mfr # 907207-01 • B&H # GTGR21)Call G-Raid 2 1.5TB 2-Disk External Hard Drive Array (Mfr # 907209-01 • B&H # GTGR21500)Call G-Raid₂ 2TB 2-Disk External Hard Drive Array (Mfr # 907211-01 • B&H # GTGR22)Call

G-RAID mini

Portable RAID 0 Storage Solutions



G-Tech has take the award winning features of the full-sized G-RAID2 and shrunk them down in to a portable system designed for mobile content creation applications. G-RAID mini is the ideal storage solution for traveling with

large amounts of data or for audio/video editing on the go. G-RAID mini incorporates the latest and greatest disk storage technology currently available - two 5400 or 7200 RPM Hitachi SATA hard drives and the new Oxford 924 bridge chipset. The use of these latest generation components enables G-RAID mini to offer superior performance and reliability for demanding content creation applications. Same features as G-RAID2 except:

- ◆ G-RAID mini is bus powered when attached to a FireWire (6 or 9-pin) port, eliminating the need to carry an external AC power supply.
- Portability was never so easy! A small power supply is included with G-RAID mini to power the device when attached to a 4-pin FireWire or USB port.
- ◆ G-RAID mini weighs just 1.15 lbs yet packs up to 500GB in to the systems compact 5.875" x 3.25" x 1.5" enclosure.
- Includes high-quality leather carrying case



KEYBOARDS & STORAGE G-TECH

G-SATA

1189

External eSATA Storage Solutions

Designed to support professional content creation workflows in which performance and reliability are paramount, G-SATA features the latest serial ATA (SATA) disk technology for ultra high data transfer rates to 135 MB/second. G-SATA comes with everything you need — including a 2-port eSATA PCIe adapter and (2) eSATA cables — to get screaming performance on your Mac Pro or PC system. G-SATA may be initialized as individual drives or configured as a software RAID 0 for performance or RAID 1 for data security. In a RAID 0 configuration, G-SATA supports the simultaneous playback of multiple streams of uncompressed video with real-time effects and audio.

- ◆ 2-drive external SATA disk storage solution
- ◆ High-performance 7200 RPM SATA II drives with 8 or 16 MB cache
- ◆ Kit includes 2-port PCIe eSATA adapter and (2) eSATA cables
- Host adapter compatible with Mac Pro OSX 10.4+ and PC systems only
- Supports multi-stream uncompressed video playback with RT effects



- Blazing data transfer rates up to 135 MB/sec
- Quiet integrated cooling fan for long life and reliable operation

G-SATA 1TB 2-Drive External SATA Hard Drive Array (Mfr # 910005-01 · B&H # GTGSD1)..... CALL



G-DRIVE & G-DRIVE Q Dual and Quad Interface Single Drive

Storage Solutions

The external G-DRIVE is ideal for digital audio and video editing, graphic design, and high-speed data backup. Sporting the latest FireWire 400 and USB 2.0 interfaces, G-DRIVE provides industry leading performance and universal connectivity. It features high-performance Hitachi 7200 RPM SATA II hard disk drives with up to 32 MB/cache, storage capacities

up to 1TB, and "Fan-less" design with unique silent cooling technology, in a compact and sturdy all aluminum enclosure. It is also Kensington security lock compatible and includes a 3-year factory warranty. G-DRIVE comes pre-formatted for Mac OSX and will mount on your desktop right out of the box. Simply reformat G-DRIVE for use with Windows. Stepping up, the G-DRIVE Q offers the ultimate in flexibility by providing FireWire 400,

FireWire 800, USB 2.0 and eSATA ports all in a single unit. In addition, G-DRIVE Q offers the best performance of any single disk external storage solution currently available... data transfer rates up to 85 MB/second (via the eSATA port.



500GB G-Drive Q: Quad Interface External Hard Drive (Mfr # 913003-01 + B&H # GTGDQ500)	CALL
750GB G-Drive Q: Quad Interface External Hard Drive (Mfr # 913005-01 • B&H # GTGDQ750)	CALL
1TB G-Drive Q: Quad Interface External Hard Drive (Mfr # 913006-01 • B&H # GTGDQ1)	CALL
FORCE C Driver Duelletorface External Lland Drive (44 # 000110.01 - 0011# CTUEE4/500)	CALL
500GB G-Drive: Dual Interface External Hard Drive (Mfr # 908112-01 • B&H # GTHDFW500)	
750GB G-Drive: Dual Interface External Hard Drive (Mfr # 908113-01 • B&H # GTHDFW750)	CALL
1TB G-Drive: Dual Interface External Hard Drive (Mfr # 908114-01 • B&H # GTHDFW1000)	CALL



LACIE BIGGEST S2S



5-DISK SATA II RAID System Tower

An extraordinary combination of high capacity - up to 5TB, RAID security, and fast speed, this 5-drive tower provides enhanced data protection, massive storage space, and a convenient plug & play user experience. Supporting RAID levels 0, 1, 0+1, and JBOD, this innovative solution at a fraction of the cost for traditional RAID systems is powered by the newest industry-leading Serial ATA (SATA II) 3Gb/s technology. Simply plug it into a SATA II 3Gb/s host and enjoy a rapid sustained transfer rate of up to 187MB/s. This all-in-one storage solution comes bundled with either the LaCie SATA II 3Gb/s PCI-Express Card 4E or PCI-X Card 4E. Designed for professionals who require high-volume security and speed, this mega-storage solution is ideal for audio/video and creative professionals.

FEATURES

SATA + RAID: Perfect For Professionals

Designed for professionals who require security and speed in external storage, it provides enhanced data security from loss due to disk failure. Support for HD Video streams of up to 1080i and 1080p (non-compressed) makes it ideal for audio/video and creative professionals. Editors can stripe the drives to immediately store and access clips in real-time without dropping frames.

Advanced SATA II 3Gb/s Technology

This innovative storage device is powered by the newest industry-leading Serial ATA (SATA II) 3Gb/s technology. For easy set-up, simply plug it into a SATA II 3Gb/s host and enjoy a rapid sustained transfer rate of up to 187MB/s (on Mac). These technological powerhouses comes bundled with either the LaCie SATA II 3Gb/s PCI-Express Card 4E or PCI-X Card 4E.

Reliable & Versatile Data Management

Transparently replicates data, eliminating a vulnerability that is often overlooked or considered too expensive to solve. Volumes can be created with mirrored drives providing automated protection along with notifications to let you know when a drive needs replacement. It also delivers exceptional sequential access performance.

5TB Biggest S2S with PCI e Card (<i>Mfr</i> # 301263U • B&H # LARBS5E) Call
5TB Biggest S2S with PCI-X Card (Mfr # 301261U • B&H # LARBS5)Call
2.5TB Biggest S2S with PCle Card (Mfr # 301135U • B&H # LARBS25E)Call
2.5TB Biggest S2S e with PCI-X Card (Mfr # 301032U • B&H # LARBS25)Call
1.25TB Biggest S2S with PCI e Card (Mfr # 301134U • B&H # LARBS125E)Call

BIGGEST QUADRA

FireWire 800, FireWire 400, Hi-Speed USB 2.0 and eSATA



Get a tremendous amount of capacity, high-speed performance and data security on demand with the LaCie Biggest Quadra. This 4-disk RAID is designed for professionals who require an easy, affordable, user-controlled solution. Select RAID 0+1, 5 or 5+hot spare with automatic background rebuilding for protecting your data or RAID 0 for high transfer rates. The four drives are removable, hot-swappable and even lockable. It comes with 1 eSATA port, 2 FireWire 800 ports (FireWire 400-compatible), and one USB 2.0 port for complete universality with any PC or Mac. Since it's plug & play and driver-free, setup is quick and easy. EMC Retrospect Express software for advanced backup management and data restoration is included for Windows and Mac users.

Optimum Storage Capacity

The Biggest Quadra represents a powerful level of storage with an astounding capacity of up to 4TB combined with RAID technology. The finest choice in flexibility, the Biggest Quadra comes with four removable, lockable drives. With FireWire 800, FireWire 400, USB 2.0 and eSATA connections, it is universally compatible for use with your PC or Mac. EMC Retrospect Express software for advanced backup management and data restoration is included for Windows and Mac users.

Superior RAID Security

A highly secure and fast RAID storage solution, the Biggest Quadra offers optimal processing potential by harnessing the power of four disks in one tower. The Biggest Quadra supports RAID levels 0, 0+1 and 5, as well as RAID 5+hot spare so you can choose your configuration depending on if you need security, speed/ capacity - or a combination of them.

BIGGEST QUADRA

Speedy & Easy To Use

High transfer rates make the Biggest Quadra well suited for audio/video and creative professionals who require a speedy path to powerful data storage and retrieval. Ideal for quickly saving hefty files, protecting databases or working directly on the drive, it delivers high-capacity performance at an affordable price. The user-friendly Biggest Quadra allows for easy installation of four arrayed disks with no driver required.

Hot-Swappable Recovery

The Biggest Quadra allows for hot-swapping should a drive fail, with automatic data rebuilding to a new drive without downtime. With the added option of designating one of the drives a hot spare, the Biggest Quadra will automatically replace a faulty one. For additional protection, it will automatically react to a drive, fan or power failure and even shut down above a temperature of 55° C to preserve itself and your data.

4 TB Biggest Quadra External Quad Interface RAID Array (Mfr # 301250U + B&H # LA4QIBQ)CALL	
3 TB Biggest Quadra External Quad Interface RAID Array (Mfr # 301249U · B&H # LA3QIBQ)	
2 TB Biggest Quadra External Quad Interface RAID Array (Mfr # 301248U · B&H # LA2QIBQ)CALL	

2big Dual Dual Interface 2-disk RAID

Taking advantage of a native RAID controller that preserves computer resources, this compact 2-disk device comes with Hi-Speed USB and faster eSATA 3Gbits connectivity. Simply select your RAID level with the switch on the back. FAST mode supports speed and capacity-demanding



applications, such as uncompressed SD video editing.

- ◆ To facilitate clean, multi-stream video playback with real time effects, select FAST mode (RAID 0) for blazing-fast speed when used in combination with the latest eSATA interface. FAST mode uses the 2big's two SATA drives simultaneously to deliver maximum playback performance of 8-bit or 10-bit uncompressed SD as well as High Definition Video (HDV) or Digital Video (DV) formats.
- SAFE mode mirrors data so if one disk fails, data remains accessible on the second one. Data redundancy can even be immediately rebuilt with a hot-swappable spare disk.
- For higher flexibility, the SAFE33/50 modes create two partitions: BIG for regular data and SAFE for data security. The heat sink metal design naturally draws heat away from the hard disk's internal components to help keep it cool and improve reliability.
- **1 TB 2big Dual Interface External Drive** (*Mfr # 3012510 B&H # LABD11TB*) **1.5 TB 2big Dual Interface External Drive** (*Mfr # 3012520 • B&H # LABD11.5TB*)
- 2 TB 2big Dual Interface External Drive (Mfr # 301253U · B&H # LABDI2TB)

2big Triple Triple Interface 2-disk RAID

This easy-to-use 2-disk RAID comes with FireWire 800, FireWire 400 and USB 2.0 interfaces. It is ideal for audio/video projects (DV and SD video playback or 2D/3D imaging projects). Offering four different RAID levels, it meets any kind of storage need:



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security, large capacity or speed. Simply select your RAID level with the mechanical switch on the back.

- FireWire 800 delivers fast burst transfer rates of up to 90MB/s in RAID 0. Choose from among 4 RAID levels depending on your needs: SAFE 100 (RAID 1) for maximum security (100% data redundancy on each hot-swappable disk) with automatic data rebuilding if a spare diskis needed; FAST (RAID 0) for maximum speed; BIG (concatenation) for maximum capacity; or JBOD to use the disks separately.
- Other advanced features include: two lockable drives; a heat sink metal design for natural cooling; "On/Auto/Off" triple power management; and rackmount configuration.
- EMC Retrospect Express advanced backup management and data restoration software, which can be launched by the LaCie Shortcut Button, is included for Windows & Mac.
- 1 TB 2big Triple Interface External Drive (Mfr # 301254U B&H # LA301254U)
- 1.5 TB 2big Triple Interface External Drive (Mfr # 301255U B&H # LA301255U)
- 2 TB 2big Triple Interface External Drive (Mfr # 301256U · B&H # LA301256U)





KEYBOARDS & STORAGE 1192 SONNET

FUSION R800RAID - D800RAID

Desktop and Rackmountable Solutions

Whether you're editing a project on your own or running a facility with multiple edit stations, if you're working in HD, you need fast and reliable storage. Sonnet's Fusion 800RAID storage systems meet your needs with breakthrough performance and data safety, provided in affordable, direct attached disk arrays for the desktop or rack. Both the award-winning Fusion D800RAID desktop system, and the Fusion R800RAID 2U rackmount system are designed for work environments where performance and fault tolerance are critical. Fusion 800RAID storage systems are fast enough to easily handle uncompressed HD while protecting the data at the same time, yet flexible enough to be configured for any workflow. Fusion800 RAIDs are currently available in 4, 6 or 8 terabyte configurations.



FEATURES

- ◆ eSATA, FireWire 800, FireWire 400, and USB 2.0 interfaces
- Single cable to host connectivity through an integrated port multiplier for all interfaces
- ◆ 4TB, 6TB, or 8TB configurations; Enterprise/RAID Edition drives(1)
- Up to 220 MB/sec transfer rate through eSATA interface (configured as RAID 0)
- Drive Activity, Drive Presence, and Power LED indicators
- Quiet fans
- ◆ eSATA, FireWire 800, FireWire 400 and USB cables included
- ◆ Compatible with Sonnet Tempo SATA II PCI-X, PCIe, and ExpressCard/34 Host Bus Adapters

Sonnet 8TB Fusion R800RAID System

with PCI Express Controller Card - Rackmount (<i>Mfr</i> # FUS-R8MR-8TB • B&H # SOFUSR8MR8TB) 7554	.95
Sonnet 8TB Fusion D800RAID System with PCI Express Controller Card - Desktop (<i>Mfr</i> # FUS-D8MR-8TB • B&H # SOFUSD8MR8TB)	5.00
Sonnet 6TB Fusion R800RAID System with PCI Express Controller Card - Rackmount (<i>Mfr</i> # FUS-R8MR-6TB • B&H # SOFUSR8MR6TB)	.95
Sonnet 6TR Fusion D800RAID System	

Sonnet 6TB Fusion D800RAID System with PCI Express Controller Card - Desktop

- ◆ RAID Performance for HD Video: The array comes configured as a RAID 0 array for maximum performance. The RAID can achieve sustained data transfer speeds of up to 220 MB/sec, allowing it to play back multiple streams of uncompressed 10-bit NTSC video.
- ◆ Quad Interface: You'll be able to connect the array to a computer via eSATA, FireWire-800, FireWire-400, or USB 2.0. Cables are included for each connection type, allowing you to get things up and running right out of the box.
- Enterprise-Class Hard Disks: Sonnet uses only Enterprise/RAID edition hard drives in this array. These drives undergo stringent testing for durability. The disks are tested for soft errors, vibration, and reliability prediction. They have a higher MTBF than standard disks for enhanced reliability.
- Cross-Platform Compatibility: The array is compatible with Windows, Mac, and Linux systems. It is compatible with editing hardware and software from most major developers

Sonnet 4TB Fusion R800RAID System with PCI Express Controller Card - Rackmount

 (Mfr # FUS-R8MR-4TB • B&H # SOFUSR8MR4TB)
 Sonnet 4TB Fusion D800RAID System with PCI Express Controller Card - Desktop (Mfr # FUS-D8MR-4TB • B&H # SOFUSD8MR4TB)
Sonnet Fusion RAID Controller Card
for D800RAID and R800RAID
 (Mfr # FUS-RC-E • B&H # SOFUSRCE)
Sonnet Power Supply Module
for Fusion D800RAID
 (Mfr # FUS-XPSD8 • B&H # SOFUSXPSD8)





KEYBOARDS & STORAGE SONNET

Fusion D-400Q - R400Q

Desktop and Rackmountable Solutions

Sonnet's award-winning Fusion[™] D400Q desktop and R400Q rackmount storage systems provide 2, 3, or 4TB(1) of storage in four swappable drive modules, and four ways to connect them to a computer. They offer speed, versatility, and reliability—they're great solutions for anyone looking for an affordable storage system that will fit into a variety of workflows. Fusion D400Q and R400Q enclosures employ a high performance SATA II port multiplier to manage the enclosed drives—just a single locking cable connects the enclosure to a SATA host controller card. This efficient



interface simplifies setup and cuts cable clutter



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without compromising performance. No SATA?

No problem—connected via a single FireWire 800, FireWire 400, or USB cable, all four drives can be accessed at the full speed of the respective interface. There is no need to reformat when changing from one interface to another, regardless the configuration.

FEATURES

All Sonnet Desktop ("D" model) Fusions have a swappable fan module that uses an ultra-quiet

fan, which is 80% quieter than a standard case fan. This Sonnet fan noise is only 20 dBA, much quieter than the desktop computer—such as a Mac Pro—that the Fusions are designed to stand



beside. Sonnet fans use a double ball bearing design for extended life.

The 1U rackmount Fusion R400Q system enclosure, at just 1.75" tall, is simple to deploy in most server racks.

◆ RAID Performance for HD Video:

The array comes configured as a RAID 5 array for high performance and data protection. The RAID can achieve sustained data transfer speeds of up to 160 MB/sec, allowing it to play back multiple streams of uncompressed 10-bit NTSC video.

PCI Express RAID Controller:

The included PCI Express RAID controller features an Intel IOP 348 RAID processor. The card features 256 MB of ECC-RAM for superlative performance. It supports DVRAID, RAID 0, RAID 1, RAID 4, RAID 5, RAID 10, JBOD groups, and hot spares for flexible configuration.

 Enterprise-Class Hard Disks: Sonnet uses only Enterprise/RAID edition hard drives in this array. These drives undergo stringent testing for durability. The disks are tested for soft errors, vibration, and reliability prediction. They have a higher MTBF than standard disks for enhanced reliability.

- Both systems feature drive presence and drive activity LED indicators on their front panels, so drive status can be determined at a glance..
- Expansion Option:

Sonnet offers an innovative storage upgrade option for this array. The Fusion D400RAID Expansion system, sold separately, is another four-disk chassis of drives. Adding the expansion system to your array not only doubles storage capacity, it also gives you the increased performance of an 8-disk system.

Sonnet3TB Fusion D400RAID System with PCI Express Controller Card (<i>Mfr</i> # FUS-D4MR-3TB • B&H # SOFUSD4MR3TB)	Sonnet3TB Fusion D400RAID Expansion System (Mfr # FUS-D4M-3TB • B&H # SOFUSD4M3TB)2214.95
Sonnet2TB Fusion D400RAID System	Sonnet2TB Fusion D400RAID
with PCI Express Controller Card	Expansion System
(Mfr # FUS-D4MR-2TB • B&H # SOFUSD4MR2TB)	(Mfr # FUS-D4M-2TB • B&H # SOFUSD4M2TB)



KEYBOARDS & STORAGE SONNET

FUSION D-500P

Mass Storage Solution

Fusion storage systems employ Enterprise/RAID Edition hard drives(2), which are subjected to hours of additional testing to check for soft errors, vibration, and other reliability predictors—just the sturdiest drives pass these tests. Only then are they prepared with special RAID-optimized firmware and become the building blocks of a super-reliable Fusion storage system. For added convenience, the swappable drive modules are compatible across the entire Fusion line.

The Fusion D500P enclosure employs a high performance SATA II port multiplier to manage the enclosed drives—just a single locking cable connects the enclosure to a SATA host controller card. This efficient interface simplifies setup and cuts cable clutter without compromising performance.



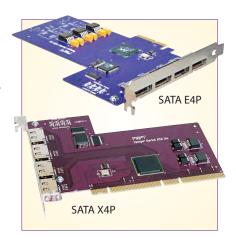
The 3.75 TB Fusion D500P eSATA Array System from Sonnet is an eSATA storage system for Windows, Mac, and Linux computers. The array features four hot-swappable drives, which can be configured as a RAID when using a compatible controller card. It supports multiple video stream playback and sustained transfer rates of 240 MB/sec when paired with a RAID 0 eSATA controller. It is an excellent solution for the large storage needs and intense performance requirements associated with video editing applications.

FEATURES

Fusion D500P systems can be used for simple backup needs. With appropriate hard drives, they are well-suited for use in editing suites such as Apple Final Cut Pro[®] and Adobe® Premiere® Pro CS3 video editing software, and video capture cards from AJA, Blackmagic Design, Matrox and Bluefish444. With an attractive and user friendly design, Fusion D500P's handsome door hides the drive modules, yet status indicator LEDs for each drive shine through. The drive modules have built-in locking levers that double as handles to make swapping easy. Or if you choose, you can secure each module in place with the built-in locks (great for added security). The Fusion D500P E-series integrates a swappable quiet fan module.

One Cable, Five Drives

Connected to a Sonnet Tempo SATA E4P PCIe or X4P PCI-X adapter installed in a Mac or Windows computer, a Fusion D500P system's drives can be accessed through its port multiplier at full speed, whether configured as RAID 0, 1, 10, or JBOD. A single Fusion D500P configured as a RAID 0 striped set achieves 240MB/sec, fast enough to support multiple streams of DV, HDV, DVCPRO, or uncompressed 8-bit 1080 HD video. Up to four Fusion D500Ps can be ganged on a single Tempo SATA E4P or X4P adapter for double, triple, or even quadruple the available streams (as well as increasing the number of supported video formats).



The array is compatible with Windows, Mac, and Linux systems. It is compatible with editing hardware and software from most major developers.

Sonnet3.75TB Fusion D500P eSATA Array System	
(Mfr # FUS-D5P-37TB • B&H # SOFUSD5P37TB)	2384.95
Sonnet2.5TB Fusion D500P eSATA Array System	
(Mfr # FUS-D5P-25TB • B&H # SOFUSD5P25TB)	1676.95
Sonnet750GB Fusion RAID Drive Module for 400-500-800	
(Mfr # FUS-RM-0750GB • B&H # SOFUSRM0750G)	443.95

Sonnet500GB Fusion RAID Drive Module for 400-500-800 (Mfr # FUS-RM-0500GB • B&H # SOFUSRM0500G)	326 95
SonnetTempo SATA E4P SATA Host Adapter for PCI Express	
(Mfr # TSATAII-E4P • B&H # SOTSE4P)	258.95
SonnetTempo SATA X4p Serial ATA Host Adapter for PCI-X	
(Mfr # TSATAII-X4P • B&H # SOTSATAIIX4P)	258.95



KEYBOARDS & STORAGE SONNET

FUSION F2

1195

Portable Storage Solution

Speed, reliability, ruggedness, and convenience—these are the essential qualities of a storage system for on-location video capture. When you need to travel light, choose a Sonnet Fusion F2 portable SATA RAID storage system. Providing 640GB of storage in a small enclosure, Fusion F2 uses eSATA connections to deliver the fastest performance



yet from a 2-drive portable storage system, with data transfer rates up to twice as fast as FireWire. By connecting Fusion F2 through a SATA host adapter like Sonnet's Tempo SATA ExpressCard/34, your notebook's FireWire 800 port is left open for use by an AJA Video Systems Io HD, which requires dedicated use of FireWire bandwidth. Fusion F2 is cool, quiet, and energy-efficient: side-by-side placement of its drives increases the metal case's cooling surface area, thereby eliminating the need for a fan, and allowing it to be bus-powered so it can be used even when no grid power is available.

RAID to Go

Connected to a Sonnet Tempo SATA ExpressCard/34 installed in a Mac-Book Pro, and with its drives configured as a RAID 0 striped volume, the Fusion F2 is capable of 126 MB/sec sustained read and write data transfers, fast enough for multiple streams of ProRes 422 (HQ). (A pair of drives connected via FireWire 800 provides only 66MB/sec.) Configured as a RAID 1 mirrored volume, Fusion F2 still can capture Apple ProRes 422 (HQ) HD fed from an AJA lo HD. This protected mode also enables you to safely transfer data from Panasonic P2, Sony SxS Pro, or similar memory cards in the field. This allows you to verify footage and to erase and reuse cards on location.

Sonnet 640GB Fusion F2 Portable eSATA Hard Drive Array (Mfr # FUS-F2-640M5 • B&H # SOFUSF2640M5)......695.95

Three Connections

Fusion F2 features two 3 Gb/sec eSATA data ports. By connecting via a direct SATA II interface with no bridge chip between the F2's case and SATA II drives, there is no resulting communication slowdown, just the fastest data transfers possible. Fusion F2 uses a novel method to power itself; it draws power from your notebook's FireWire 400 port. Instead of relying on a bulky external power supply that may not work everywhere you go, Fusion F2 uses an included FireWire-to-power cable. Whether your notebook is plugged in or running off its battery, Fusion F2 operates anywhere your computer does. Another FireWire device, or a powered hub can also power Fusion F2, if necessary.

SonnetTempo - 2-Port ExpressCard/34 eSATA Controller

Hours of Footage per Fusion Model Based on Raw Capacity

HD Hours of Capacity	Fusion 2TB	Fusion 2.5TB	Fusion 3TB	Fusion 3.75TB	Fusion 4TB	Fusion 5TB	Fusion 6TB	Fusion 8TB
HDV 1080 60i	167	209	251	314	335	418	502	100
DVCPRO HD 1080i 59.94	45	56	68	85	90	113	136	181
Uncompressed SD 8-bit PRORES 720 59.94 PRORES 1080 29.97 DNXHD 165 Mb/sec	30	37	45	56	60	75	90	182
Uncompressed SD 10-bit PRORES 720 59.94 PRORES 1080 29.97 DNXHD 220 Mb/sec	20	25	30	37	40	50	60	121
HD 720p 8-bit	5.1	6.3	7.6	9.5	10.1	12.6	15.2	30.4
HD 720p 10-bit	4	5	6	7.5	8	10	12.1	24
HD 1080i 8-bit	4.6	5.8	6.9	8.7	9.3	11.6	13.9	27.8
HD 1080i 10-bit 4:2:2	3.6	4.5	5.4	6.7	7.2	9	10.8	21.6
HD 1080i 10-bit 4:4:4	2.3	2.9	3.5	4.4	4.7	5.8	7	14
2K 10-bit RGB	1.8	2.3	2.7	3.4	3.6	4.6	5.5	11

