

# DaVinci Resolve for Mac

Configuration Guide

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## Understanding DaVinci Resolve for Mac

The world's highest performing color grading system is now made simple. You can now build your own DaVinci Resolve with this easy to follow guide.



DaVinci Resolve for Mac operates on current Intel based Mac Pro and MacBook Pro computers. All Resolve systems require a high performance graphics processor for the GUI, a GPU for image processing and disk storage. Resolve supports dual link capture cards for SDI monitoring.

This guide contains important information which will help you configure your Mac as a DaVinci Resolve color grading system including recommended hardware configurations. It also guides you through loading the DaVinci Resolve software.

## Hardware Configurations

Resolve for Mac is configurable for different operational requirements based around the performance you need and the available hardware options. →

It is essential to build a Resolve system with high performance computer hardware. This document lists both new and superseded hardware so you can save money by using some of your existing Mac gear.

### MacBook Pro

If your projects are all SD, or for the web, you could use a 17-inch MacBook Pro, just as those working in the field would use for on set work. The high performance NVIDIA graphics processor includes CUDA support, which is essential for Resolve.

### Mac Pro

A powerful Mac Pro will be required if you ingest video from tape, have video clips in a raw digital camera format, or for working with projects in HD, 2K and 4K.

### Direct Attached Storage

For SD and HD, a Mac Pro with a RAID Card and internal drives is all you will need for storage. Alternatively an external disk array and HBA card could be used for additional disk performance and storage, especially with 2K and 4K. The RAID or HBA card will usually occupy PCI Express slot 4.

### SAN Storage

Resolve facilities with SAN based shared storage can use a Mac Pro with a fiber channel connection to work on projects that are being graded in other Mac or Linux suites. The fiber channel card will usually occupy PCI Express slot 4.



### SDI Monitoring

All colorists will want to use a proper grading monitor, connected to a SDI capture card, for 2D and 3D monitoring. This card will usually occupy PCI Express slot 3 in the Mac Pro.

### Graphics Processors

Two specific graphics cards are required by the Mac Pro; one for the GUI and one for GPU processing. Only the certified card models listed in this document will provide the necessary performance for Resolve. These cards will occupy PCI Express slots 1 and 2 in the Mac Pro.



### GUI Monitor

The Resolve application is optimized for 1920 x 1200 screen resolution but will also work with 1920 x 1080 and higher screen resolutions.

### RED r3d Decoding

DaVinci Resolve can perform RED r3d decoding at various resolutions and de-bayer qualities to match the realtime performance of your computer hardware. If a RED Rocket card is installed, full resolution and premium de-bayer quality of 2K files can be achieved, as can premium de-bayer quality of 4K files at half resolution. If you plan on using a RED Rocket card in slot 4, the Mac Pro's limitation of four PCIe slots will necessitate the use of either a PCI Express expansion chassis, an internal storage software RAID and/or a FireWire 800 drive.

Realtime r3d decoding can be performed without the RED Rocket card but at reduced resolution and de-bayer quality. If 4K r3d files need to be processed in real time at maximum quality, a Resolve for Linux system with multiple GPUs must be used. As newer generations of faster computers become available, the realtime r3d decoding performance will increase.

### 4K

With the increasing use of digital cameras, many colorists want to grade 4K or higher resolutions in real time. These cameras provide 4K or higher capture resolutions but store the images as compressed data. While this takes less storage space and bandwidth, the compressed data needs the full image processing bandwidth once the images are decompressed for grading. Full size RGB 4K resolution images can be played back by Resolve for Mac but the disk, GPU and Mac Pro will not provide real time playback.

Traditionally a multi-GPU Resolve Linux system would be used for such demanding tasks. Fortunately Resolve for Mac can pre-generate HD proxies, from the 4K source images for grading, and then render using the high resolution source images as needed.

### Building a Resolve

Detailed hardware configuration information is provided in the section "Building a Resolve". Newer, faster hardware models will provide greater performance than those mentioned in this guide. Finally, the "Certified Component" list details everything you will require to build a DaVinci Resolve color grading system using your Mac.



## Storage

The Preferences option under the Resolve menu is where you can add or remove internal and external disk storage for use with Resolve.

We have certified a number of internal and external storage systems including the Apple Mac Pro RAID Card as well as the CalDigit HDPro2 and Rorke Data Aurora external disk arrays. Almost any storage, designed for Mac OS X and high bandwidth media, will be suitable for use with Resolve.

While external disk arrays can provide much higher performance by using more disks, the four internal disk bays in the Mac Pro can provide adequate performance for SD and HD video. We recommend installing a fifth disk under the optical drive for Mac OS X and application software. We used five 7200rpm SATA 3Gbps disks in our tests but faster SAS or SSD disks could be used. Note that SSD disks can only be used in an internal software RAID and not with the Apple Mac Pro RAID Card. The following results were achieved with the internal four-disk RAID of the Mac Pro.

- Apple Mac Pro RAID Card set to RAID 0 - very good performance for SD and HD
- Apple software RAID 0 - passable for SD and HD
- Apple Mac Pro RAID Card set to RAID 5 - not good for HD

Resolve facilities with SAN based shared storage can use a Mac Pro with a fiber channel connection to work on projects that are being graded in other Mac or Linux suites.

Resolve supports the Quantum StorNext file system via an Apple Xsan 2.x license so you can connect the Resolve Mac Pro to a Storage Area Network (SAN). The most common connection method for the SAN storage is via dual 4Gbit Fiber Channel connections to a FC card in the Resolve Mac Pro. This can be direct or via a FC switch.

If you plan on using a SAN please do so in conjunction with your local distributor and/or your storage subsystem vendor. We have certified the Bright Systems, DVS and standard StorNext system version 3.5.2. Please seek guidance from your local Quantum support office.

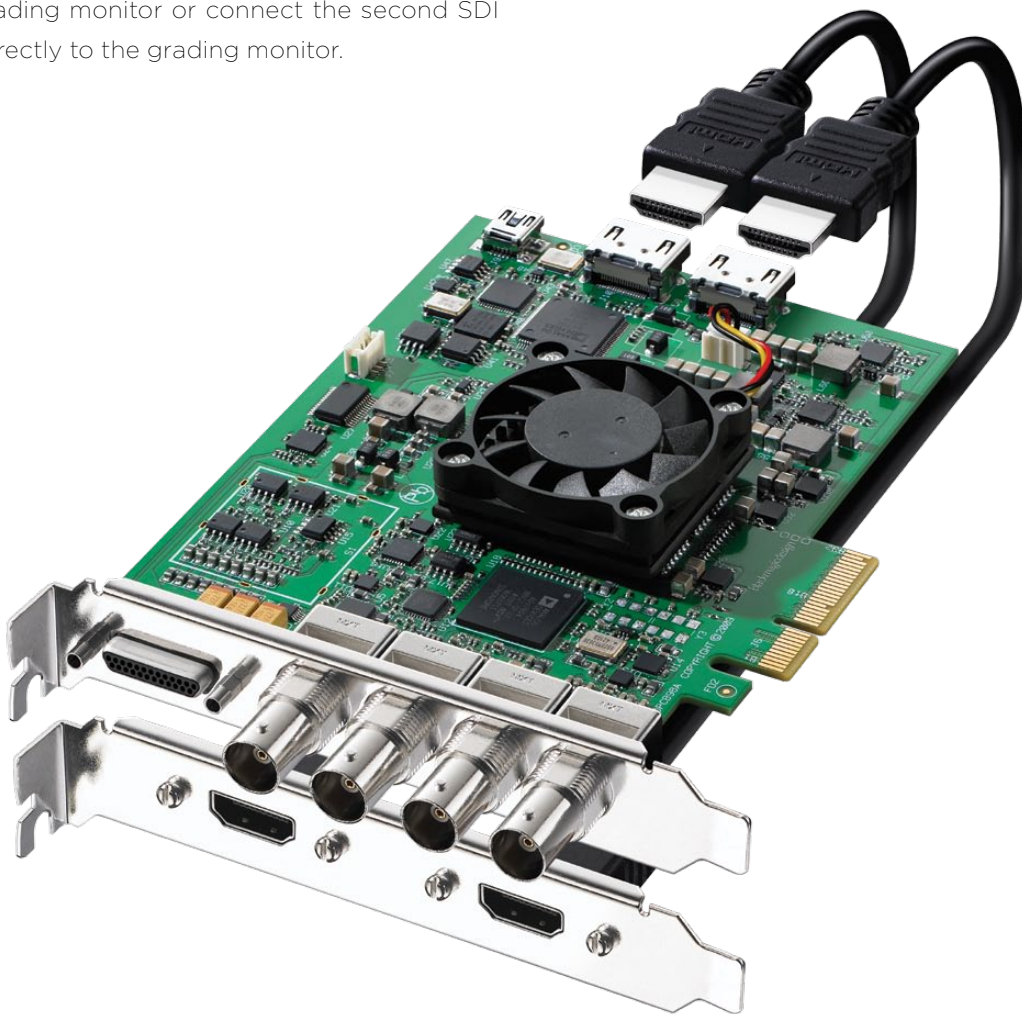
On a MacBook Pro, fast storage options are limited which is also true of all notebook computers. We recommend at least upgrading from the standard 5400 rpm hard drive to 7200 rpm. Replacing the internal hard drive, with the biggest SSD you can afford, will make a substantial improvement to Resolve's performance.

## Video Capture and Playback

Resolve uses dual link DeckLink cards, as the standard hardware for video and audio ingest and playback. These DeckLink cards support SD, HD, 2K and 3Gb/s SDI video with 16 channels of audio. These DeckLink cards also feature analog audio and video, HDMI audio and video, external sync and VTR control via a RS-422 connection. All features are included as standard with the card.

The capture card output is used for the grading monitor feed and also for the video output to the VTR. Users can loop a single feed from the VTR to the grading monitor or connect the second SDI output directly to the grading monitor.

The Resolve installer installs certified DeckLink drivers for Resolve and other DeckLink driver versions should not be used. If you have accidentally installed separate DeckLink drivers, run the DeckLink Uninstall utility from the DeckLink disk image. Then reinstall Resolve.



## Installing the Resolve Application

### The DaVinci Resolve Installer. →

Installing or updating Resolve is essentially the same process. Insert the Resolve CD or open the downloaded disk image. The installer window will open. Double-click the 'Resolve Installer' icon and follow the onscreen prompts to install the software.

You will need an Administrator password to install the software on your Mac and we recommend that Resolve be installed into the standard Applications folder on your startup hard disk.

The installation process takes just a couple of minutes. When the installation has been completed, you will be prompted to restart your Mac. After the software has been installed and your Mac has restarted, you may wish to add the application icon to your dock to make Resolve easy to launch.

The included USB dongle contains the Resolve for Mac license and must be connected to your computer before launching the Resolve software.

If you use Apple Final Cut Pro or Adobe Premiere Pro on the same Mac as Resolve, and you wish to use these applications with a DeckLink card, install Resolve last. The Resolve installer includes DeckLink drivers and associated easy setups and presets for Final Cut Pro and Premiere Pro.

The Resolve installer also includes Apple ProRes QuickTime codecs. Unlike earlier versions of Resolve, it is no longer necessary to install Final Cut Studio on the same Mac in order to render ProRes files.

If you work with Avid DNxHD® MXF files on your Mac, you will need the DaVinci Resolve DNxHD Update which can be purchased from Blackmagic Design resellers. This software is installed in the same manner as the Resolve Installer.

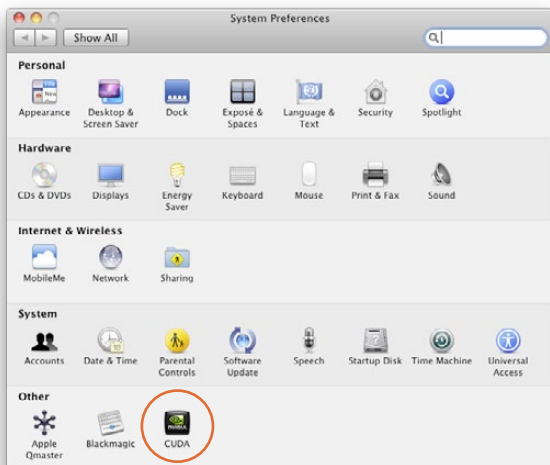


## Updating CUDA for Resolve

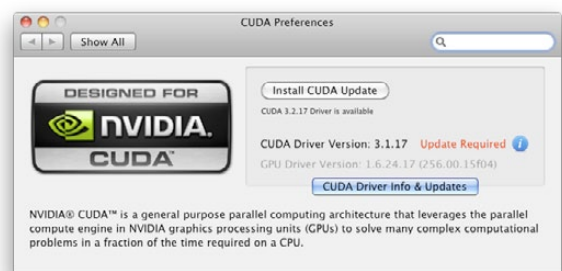
NVIDIA CUDA drivers will be installed on your Mac when DaVinci Resolve is installed. Updates to Resolve will usually contain updates to CUDA as well as other drivers such as Blackmagic DeckLink.

If the message, “WARNING: No CUDA Acceleration Hardware Detected,” appears when you launch Resolve, but your Mac contains the recommended NVIDIA GPUs, you will need to quit out of Resolve and update the NVIDIA CUDA drivers.

After quitting from Resolve, go to the Apple menu and choose System Preferences.

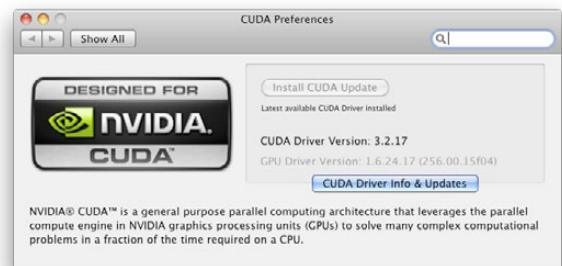


Click on the CUDA icon to reveal the CUDA Preferences. If your Mac is connected to the Internet, the CUDA drivers will check for any updates and prompt you to “Install CUDA Update” if an update exists.



Click on the “Install CUDA Update” button and follow the onscreen prompts to update the CUDA drivers on your Mac.

Once the CUDA drivers are up to date, the CUDA Preferences will report, “Latest available CUDA Driver installed”.



You should now be able to successfully launch DaVinci Resolve.

## Linking Resolve Software to Hardware

There are three hardware items to configure when you first start the Resolve application. Click the DaVinci Resolve menu and choose Preferences. The DaVinci Resolve Preferences window will open and reveal the 'Basic' tab.

Click on the "+" (add) button to add a volume, folder or mount point to the list of disk storage for your media. The first location in the storage list will become the default location for images, all proxies, cached files and gallery stills. This location will usually be an internal or external disk array. It should have plenty of storage capacity and be permanently connected to your Mac.

Click on the "-" (remove) button to remove a volume, folder or mount point from the list of disk storage.

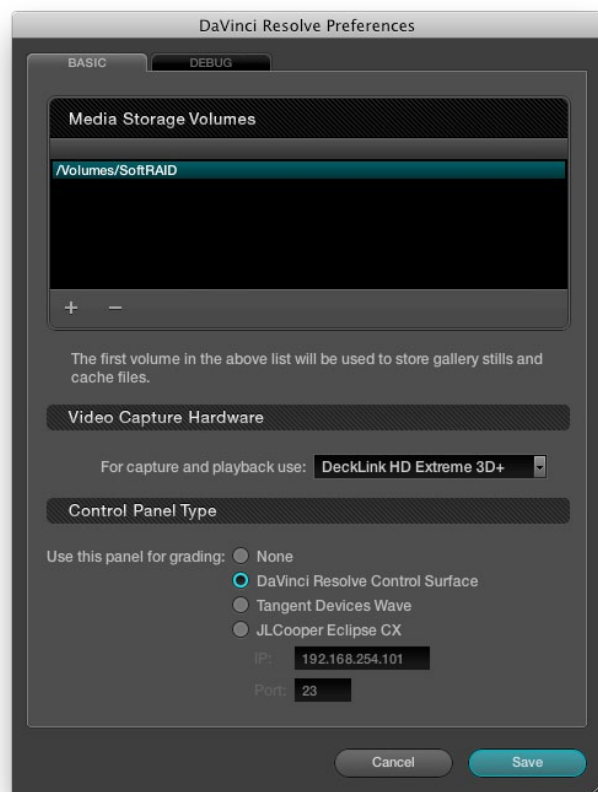
Select which capture card you will use for SDI monitoring. MacBook Pro notebook computers are unable to provide SDI monitoring.

Finally, choose which control panel hardware you have connected to your Mac. DaVinci Resolve for Mac supports the current USB 2.0 generation of DaVinci Resolve Control Surface but can also be used with the JLCooper Eclipse CX and Tangent Devices WAVE.

After changing any of these preferences and clicking "Save", you will be prompted to restart the Resolve application.

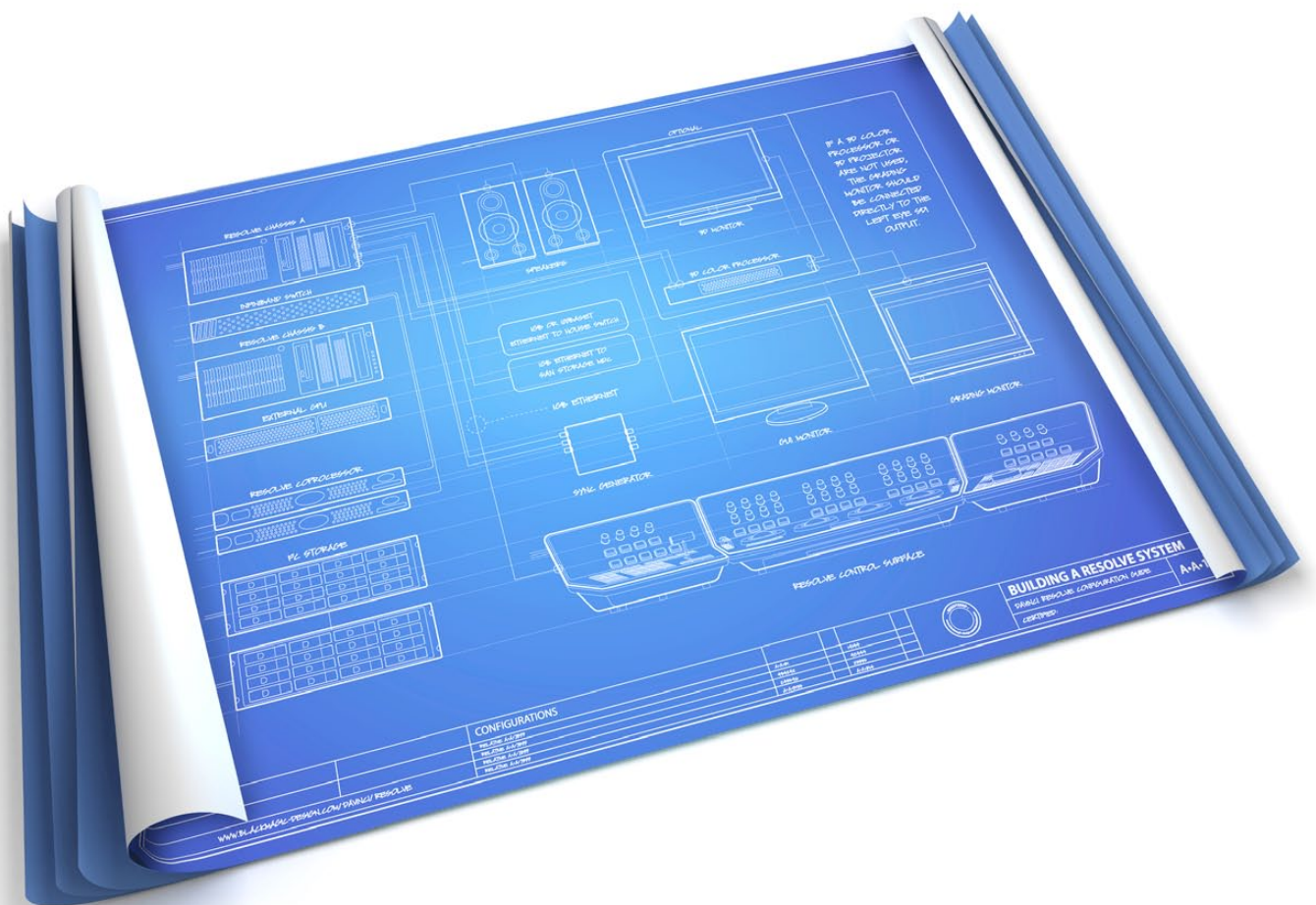
**Please note:** Older generations of DaVinci control panels, with ethernet connections, were exclusively designed for Linux and cannot be used with DaVinci Resolve on Mac OS X.

If using a JLCooper Eclipse CX, follow the Eclipse CX documentation to connect and configure it with an Ethernet port on your Mac. Then launch Resolve, use the Preferences to select the Eclipse CX panel and click 'save'. If you have changed the IP address or port from the default panel settings, enter the IP address and port number for your panel and then click 'save'. Restart the DaVinci Resolve application and you will see the panel menus as soon as the application starts.



# Building a Resolve

DaVinci Resolve is as simple as knowing where to find the certified parts. To help make it easy, we have listed all of the parts you need to build your DaVinci Resolve and where to find your nearest supplier.



# Building a Resolve Mac Pro

## Recommended for SD and HD in realtime

- ✓ Great for SD and HD in realtime with lots of windows, defocus & blurs
- ✓ Good for 2K
- ✓ Grading monitor support via SDI capture card
- ✓ Internal, external and SAN storage options

Resolve works in SD, HD and 2K in real time and full quality on any certified 2009 or 2010 series Mac Pro. Resolve software can easily work in 4K although current Mac Pro models do not have sufficient performance to work in 4K at full quality and in real time.

Resolve works with any certified 2008 series Mac Pro for uncompressed SD and HD in real time and full quality. When working in HD, set the "Video bit depth" to "8 bit" in the Video Monitoring preferences of the Configuration screen. This has no impact on render or tape quality and all SDI I/O is at full bit depth quality.

Resolve requires the dedicated GPU performance of the NVIDIA Quadro 4000 for Mac, or the NVIDIA Quadro FX 4800 for Mac, or the discontinued NVIDIA GeForce GTX 285 for Mac. The specific PCI Express slots used by the GPU cards are determined by the combination of graphics cards used. Please refer to the Mac Pro Slot Configuration tables in this section for guidance.

When using an NVIDIA Quadro 4000 for Mac, as the GPU, install the GPU card in slot 2 and the GUI card in slot 1. The GUI card can be: an ATI Radeon HD 5770, an NVIDIA GeForce GT 120 for Mac or an NVIDIA Quadro 4000 for Mac. Please note Apple states the ATI Radeon HD 5770 card requires a Mid 2010 Mac Pro for compatibility despite many customers successfully using this card with 2008 and 2009 series Mac Pros.

When using an NVIDIA Quadro FX 4800 or NVIDIA GeForce GTX 285, as the GPU, the Mac Pro should initially be set up with the NVIDIA GeForce GT 120 for Mac (GUI card) in slot 1. Move this card to slot 2 after configuration has been completed.

The GUI monitor must remain connected to the GUI card. If you connect the monitor to the wrong GPU card, Resolve performance will be unusable.

Apple ProRes QuickTime files are fully supported even if Apple Final Cut Studio is not installed. Avid DNxHD@MXF files are supported if the DaVinci Resolve DNxHD Update is installed. The DaVinci Resolve DNxHD Update can be purchased from Blackmagic Design resellers.

RED r3d files, up to 2K resolution, can be played back in realtime in full resolution and premium debayer quality with the addition of a RED Rocket card. Only slots 3 or 4 should be used for the RED Rocket which would also prevent the use of a HBA, RAID or capture card.

A certified PCI Express expansion chassis can be used to effectively add more slots to a Mac Pro. The expansion chassis enables the option to install multiple GPU cards and RED Rocket cards without having to sacrifice a HBA, RAID or capture card. The expansion chassis should always connect to slot 2, in the Mac Pro, and any GPU cards should be installed in the expansion chassis. There are literally hundreds of possible slot configurations between the Mac Pro and the PCI Express expansion chassis. We have certified and presented a few configurations in this guide but expect that most slot configurations should work fine.

When using a multi-GPU Resolve Linux configuration, a Resolve Mac Pro can be used to perform non-creative, "assistant" tasks before and after a project is graded in the suite. This maximizes the productive grading time of the colorist. No grading control panel is required for assistant tasks and you only need the Resolve for Mac software.

# Building a Resolve Mac Pro

## Recommended for SD and HD in realtime

### Choosing graphics cards for your Mac Pro

When using a Mac Pro without a PCI Express expansion chassis, the choice of graphics cards for the Resolve GUI and GPU is limited by the width of the cards, the number of auxiliary PCIe power connections they require and whether new cards will be purchased or existing cards reused.

Slots 1 and 2 in the Mac Pro are most suitable for graphics cards as they provide maximum bandwidth and run the cards at full speed. Slot 1 is double-width and slot 2 is single-width. Some graphics cards only need a single-width PCIe slot whereas others require a double-width slot.

The Mac Pro provides two auxiliary PCIe power connections. The number of power connections required by a graphics card might be 2, 1 or none.

When choosing GUI and GPU cards for your Mac Pro, ensure the total number of auxiliary PCIe power connections is no more than 2, and that no more than 1 of these cards requires a double-width slot.

The table below shows the slot-width and power connections required for all supported graphics cards.

The ATI Radeon HD 5770 is a standard graphics card with the mid 2010 series of Mac Pro computers. This means that customers purchasing a new Mac Pro are no longer required to discard the standard GUI card and replace it with an NVIDIA GeForce GT 120 at extra cost.

While the ATI Radeon HD 5770 and NVIDIA Quadro 4000 cards are the latest combination of graphics cards for Resolve, the highest GPU performance for Resolve continues to be the combination of NVIDIA GeForce GT 120 (GUI) and NVIDIA GeForce GTX 285 (GPU). Unfortunately the NVIDIA GeForce GTX 285 is no longer available but owners of this card will continue to enjoy the highest GPU performance in Resolve. The NVIDIA Quadro FX 4800 delivers higher performance than the NVIDIA Quadro 4000 and the Quadro 4000 is not designed to replace it. The Quadro 4000 is available at a much lower cost than the Quadro FX 4800.

### Physical requirements of graphics cards

Board	Required width of PCIe slots	Auxiliary PCIe power connections	Function
ATI Radeon HD 5770	2	1	GUI
NVIDIA GeForce GT 120	1	0	GUI
NVIDIA GeForce GTX 285	2	2	GPU
NVIDIA Quadro 4000	1	1	GPU or GUI
NVIDIA Quadro FX 4800	2	1	GPU

# Building a Resolve Mac Pro

Recommended for SD and HD in realtime

Where to install your hardware in a Mac Pro

MAC PRO SLOT CONFIGURATION using an NVIDIA Quadro 4000 for the Resolve GPU

Motherboard Slot	Board	Function
4	HBA or RAID card	Storage interface
3	Capture card	Video & audio I/O
2	NVIDIA Quadro 4000	GPU for Resolve
1	ATI Radeon HD 5770 or NVIDIA GeForce GT 120 or NVIDIA Quadro 4000	GUI for computer display

MAC PRO SLOT CONFIGURATION using an NVIDIA Quadro FX 4800 or GeForce GTX 285 for the Resolve GPU

Motherboard Slot	Board	Function
4	HBA or RAID card	Storage interface
3	Capture card	Video & audio I/O
2	NVIDIA GeForce GT 120	GUI for computer display
1	NVIDIA Quadro FX 4800 or NVIDIA GeForce GTX 285	GPU for Resolve

# Building a Resolve Mac Pro

## Recommended for SD and HD in realtime

Where to install your hardware in a Mac Pro and PCIe expansion chassis

EXPANDED SLOT CONFIGURATION using 2x double-width GPU cards for 3D stereoscopic image processing

Motherboard Slot	Mac Pro
4	HBA or RAID card
3	Capture card
2	CUBIX PCIe x16 connector card
1	ATI Radeon HD 5770

Slot	CUBIX PCI Express Expander
4	NVIDIA GeForce GTX 285
3	- blocked
2	NVIDIA GeForce GTX 285
1	- blocked

EXPANDED SLOT CONFIGURATION using 3x single-width GPU cards and a RED Rocket card

Motherboard Slot	Mac Pro
4	HBA or RAID card
3	Capture card
2	CUBIX PCIe x16 connector card
1	ATI Radeon HD 5770

Slot	CUBIX PCI Express Expander
4	NVIDIA Quadro 4000
3	NVIDIA Quadro 4000
2	RED Rocket card
1	NVIDIA Quadro 4000

EXPANDED SLOT CONFIGURATION using 2x single-width GPU cards and 2x RED Rocket cards for 3D stereoscopic image processing of RED r3d files

Motherboard Slot	Mac Pro
4	HBA or RAID card
3	Capture card
2	CUBIX PCIe x16 connector card
1	ATI Radeon HD 5770

Slot	CUBIX PCI Express Expander
4	NVIDIA Quadro 4000
3	NVIDIA Quadro 4000
2	RED Rocket card
1	RED Rocket card

# Building a Resolve Mac Pro

## Parts List

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### Computer

**Apple Mac Pro:**

Early 2008, Two 2.8GHz Quad Core  
 or  
 Early 2008, Two 3.0GHz Quad Core  
 or  
 Early 2008, Two 3.2GHz Quad Core

**Operating System:** Mac OS X 10.6.5

**Optical Drive:** 1 x SuperDrive

**RAM:** 8 GB or more

Early 2009, Two 2.26GHz Quad Core  
 or  
 Early 2009, Two 2.66GHz Quad Core  
 or  
 Early 2009, Two 2.93GHz Quad Core  
 or  
 Mid 2010, Two 2.4GHz Quad Core  
 or  
 Mid 2010, Two 2.66GHz 6-Core  
 or  
 Mid 2010, Two 2.93GHz 6-Core

**Operating System:** Mac OS X 10.6.5

**Optical Drive:** 1 x SuperDrive

**RAM:** 6, 12 or 24 GB for memory optimization (not 8, 16 or 32 GB).

### Graphics Processor for GUI

1 x ATI Radeon HD 5770 for Mac video card  
 or  
 1 x NVIDIA GeForce GT 120 video card  
 or  
 1 x NVIDIA Quadro 4000 for Mac video card

### Graphics Processor for GPU

1 x NVIDIA Quadro 4000 for Mac video card  
 or  
 1 x NVIDIA Quadro FX 4800 for Mac video card  
 or  
 1 x NVIDIA GeForce GTX 285 PCIe video card

### Control Panel and Software

1 x DaVinci Resolve Control Surface with USB  
 or  
 1 x JLCopper ECLIPSE CX, plus  
 1 x DaVinci Resolve Software for Mac  
 or  
 1 x Tangent Devices WAVE, plus  
 1 x DaVinci Resolve Software for Mac

### GUI Monitor

1 x Apple LED Cinema Display 24"  
 or  
 1 x Apple LED Cinema Display 27"  
 or  
 Any monitor meeting the following criteria:

- DVI-D or Mini DisplayPort input
- IPS or TFT LCD flat panel with black bezel
- 1920 x 1200 is the preferred screen resolution. 1920 x 1080 and higher screen resolutions are also supported
- 1000:1 contrast ratio or better
- 8ms response time or better
- 16 million colors or better

# Building a Resolve Mac Pro

## Parts List

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### Capture Card

1 x DeckLink HD Extreme 3D+  
or  
1 x DeckLink HD Extreme 3D  
or  
1 x DeckLink HD Extreme 3

### Optional Codec Support

DaVinci Resolve DNxHD Update software  
for working with Avid DNxHD MXF files.

RED Rocket PCIe hardware card  
for accelerated processing of RED r3d files.

### Optional PCIe Expansion

1 x CUBIX GPU-Xpander Desktop 2, plus  
1 x CUBIX 4-slot PCIe x16 backplane, plus  
1 x CUBIX PCI Express x16 Data Cable and Adapter

### Storage Options - External

1 x CalDigit HDPro2 (8 bay disk array)  
or  
1 x 4Gbps Dual Channel Fiber Channel card, plus  
1 x Rorke Data Galaxy Aurora (24 bay disk array)

### Storage Options - SAN Connection

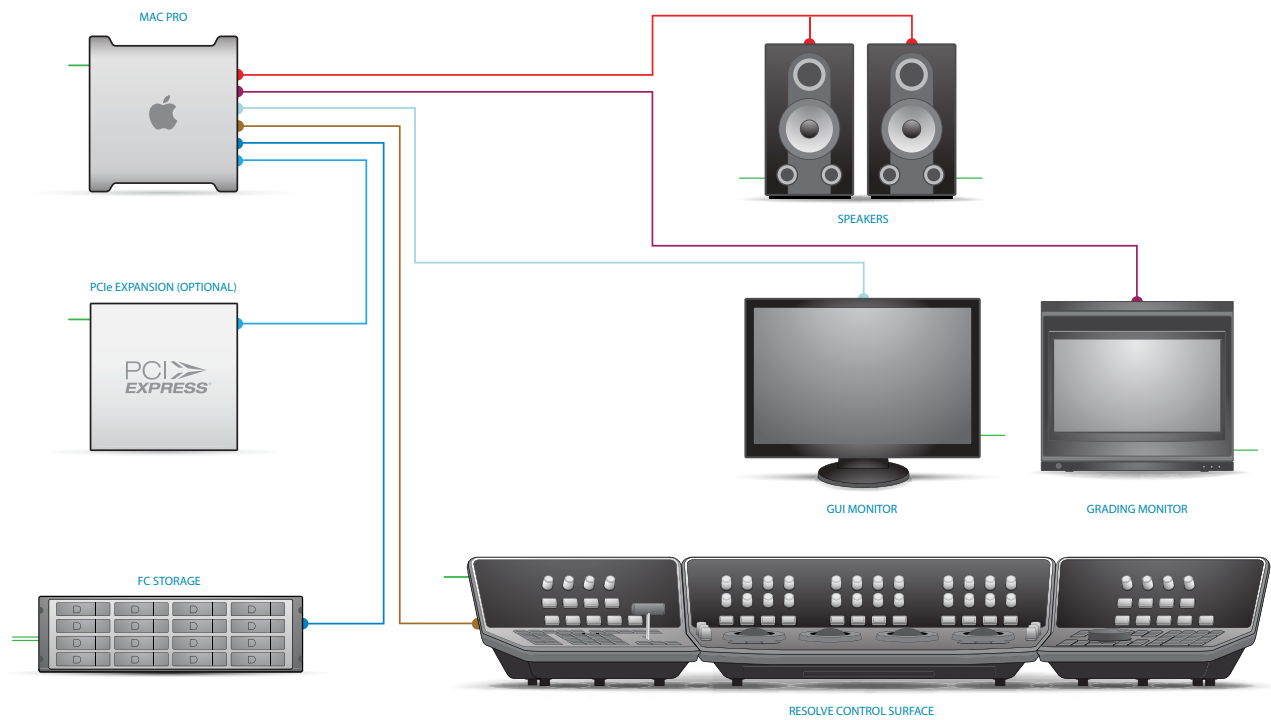
1 x Apple Xsan software, plus  
1 x Apple Dual-Channel 4Gb Fibre Channel PCIe Card

### Storage Options - Internal

5 x 7200rpm SATA hard disks, plus  
1 x OWC Multi-Mount 3.5" to 5.25" bracket set  
or  
1 x Apple Mac Pro RAID Card, plus  
5 x 7200rpm SATA hard disks, plus  
1 x OWC Multi-Mount 3.5" to 5.25" bracket set  
or  
1 x Apple Mac Pro RAID Card, plus  
4 x 15000rpm SAS hard disks for the RAID, plus  
1 x OWC Multi-Mount 3.5" to 5.25" bracket set, plus  
1 x 7200rpm SATA hard disk for the operating system

# Building a Resolve Mac Pro

## Connection Diagram



- DVI
- USB
- HD-SDI
- PCI-E Extender
- 4 Gbit FC
- Reference
- Audio
- RS422
- Electrical Power

# Building a Resolve MacBook Pro

## Suitable for SD and SD/HD shot preview

- ✓ Ideal for on-set, pre-grade, preview and training
- ✓ Realtime processing of SD DPX files
- ✓ Apply shot by shot 'look' grades to HD images
- ✓ Internal SATA or SSD storage options

DaVinci Resolve on a 17-inch MacBook Pro is fully featured and not limited in any way. As with other Resolve configurations, the Resolve MacBook Pro benefits from being used with the DaVinci Resolve Control Surface but can also be used with the JLC Cooper Eclipse CX and Tangent Devices WAVE. The only limitations are those imposed by the notebook disk, GPU and CPU speeds.

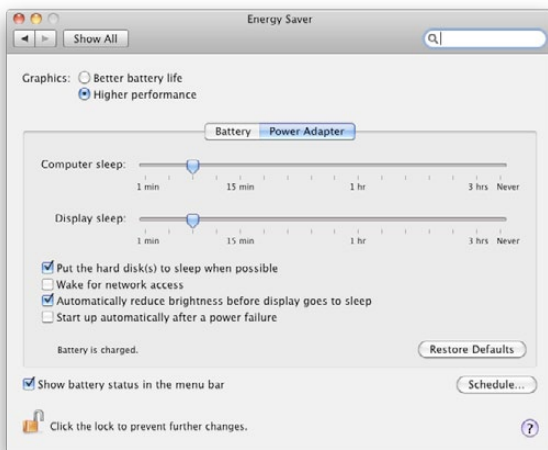
The MacBook Pro is ideal for on-set, pre-grade, preview and training. It can provide a preview of material in SD and apply shot by shot 'look' grades on HD images so the project file can be exported to a Mac Pro or Linux system.

While external disk connections can be made via ExpressCard34, FireWire and USB ports, the best disk performance will be achieved by using the fastest available internal drive. We recommend at least upgrading from the standard 5400 rpm hard drive to 7200 rpm. Replacing the internal hard drive,

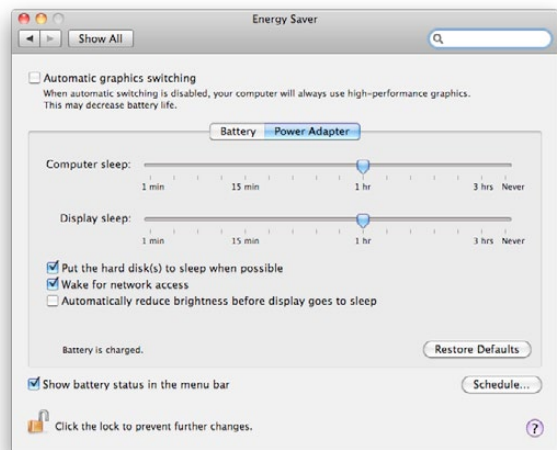
with the biggest solid state drive (SSD) you can afford, will make a substantial improvement to Resolve's performance.

The MacBook Pro contains two GPUs; one for high performance graphics and the other for better battery life. It is essential to enter the Energy Saver preferences, in the System Preferences of Mac OS X, and select the high performance graphics option. Failing to do so will render Resolve unusable. On the mid 2009 model, set the Graphics radio button to "Higher Performance". On the mid 2010 model, disable the "Automatic graphics switching" checkbox.

Apple ProRes QuickTime files are fully supported even if Apple Final Cut Studio is not installed. Avid DNxHD® MXF files are supported if the DaVinci Resolve DNxHD Update is installed. The DaVinci Resolve DNxHD Update can be purchased from Blackmagic Design resellers.



Set the Graphics radio button to "Higher Performance" on the 17-inch, Mid 2009, MacBook Pro



Disable the "Automatic graphics switching" checkbox on the 17-inch, Mid 2010, MacBook Pro

# Building a Resolve MacBook Pro

## Parts List

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### Computer

#### Apple MacBook Pro:

17-inch, Mid 2009, 2.8GHz Core 2 Duo

or

17-inch, Mid 2009, 3.06GHz Core 2 Duo

or

17-inch, Mid 2010, 2.53GHz Intel Core i5

or

17-inch, Mid 2010, 2.66GHz Intel Core i7

**Operating System:** Mac OS X 10.6.5

**RAM:** 4 or 8 GB

### Control Panel and Software

1 x DaVinci Resolve Control Surface with USB

or

1 x JLC Cooper ECLIPSE CX, plus

1 x DaVinci Resolve Software for Mac

or

1 x Tangent Devices WAVE, plus

1 x DaVinci Resolve Software for Mac

### Storage Options - Internal

1 x 5400rpm SATA hard disk

or

1 x 7200rpm SATA hard disk

or

1 x solid state drive (SSD)

### Optional Codec Support

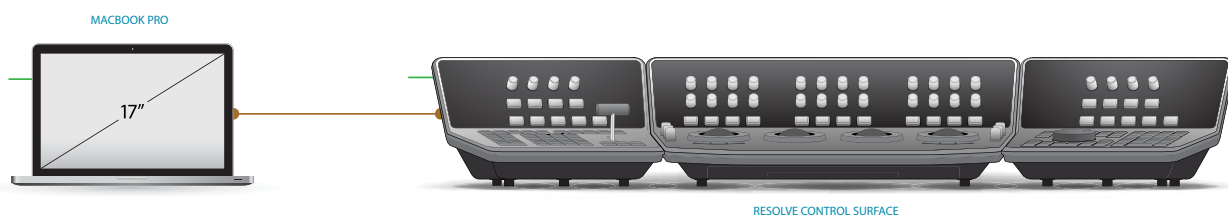
DaVinci Resolve DNxHD Update software

for working with Avid DNxHD MXF files.

# Building a Resolve MacBook Pro

## Connection Diagram

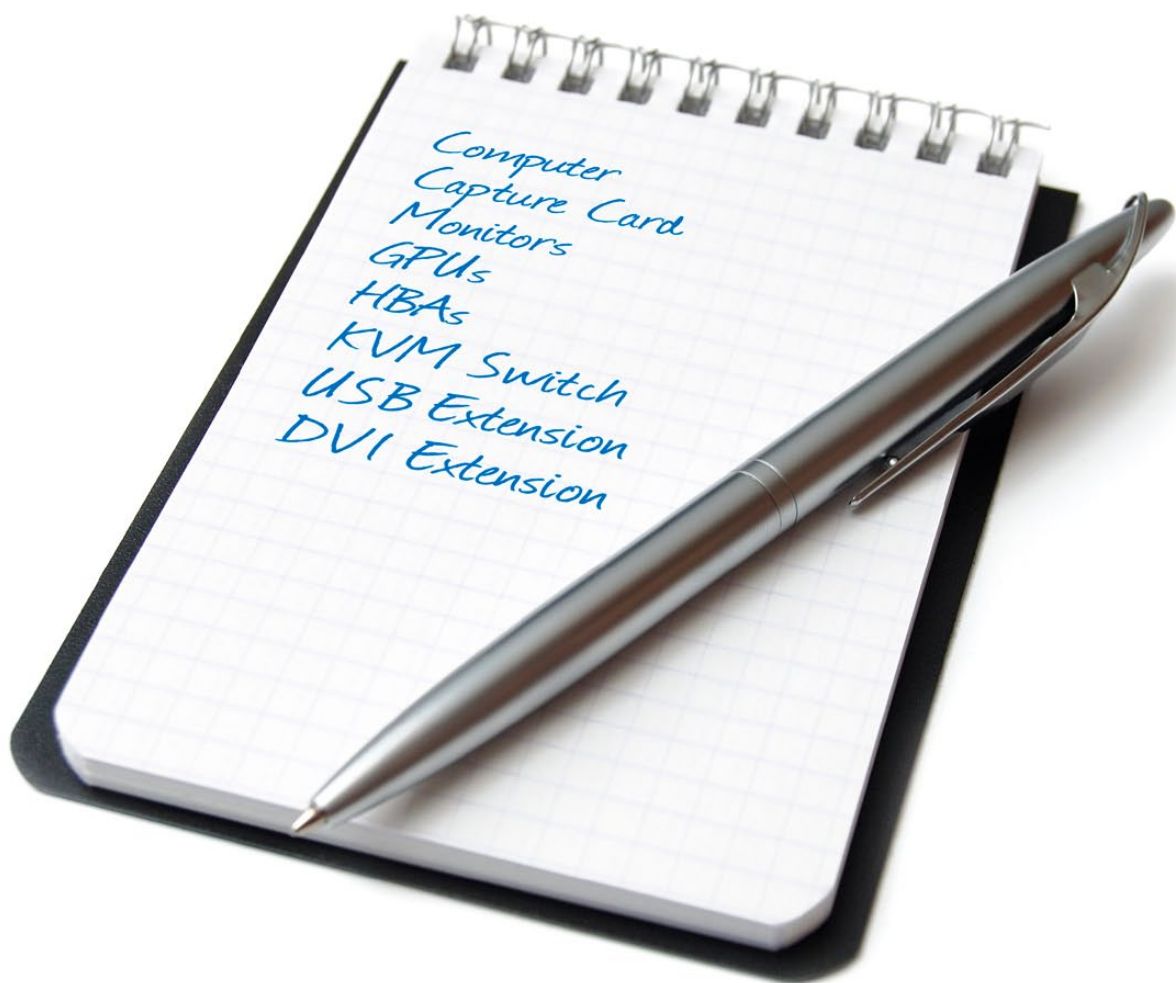
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- DVI
- USB
- HD-SDI
- PCI-E Extender
- 4 Gbit FC
- Reference
- Audio
- RS422
- Electrical Power

## What to buy

Building a DaVinci Resolve is as simple as knowing where to find the certified parts. To help make it easy, we have listed all of the parts you need to build your DaVinci Resolve for Mac and where to find your nearest supplier.



## Certified Components

### Computer

#### Apple Mac Pro (Mid 2010), Two 2.4GHz Intel Quad Core

<http://www.apple.com/macpro/specs.html>

#### Apple Mac Pro (Mid 2010), Two 2.66GHz Intel 6-Core

<http://www.apple.com/macpro/specs.html>

#### Apple Mac Pro (Mid 2010), Two 2.93GHz Intel 6-Core

<http://www.apple.com/macpro/specs.html>

#### Apple MacBook Pro (17-inch, Mid 2010), 2.53GHz Intel Core i5

<http://www.apple.com/macbookpro/specs-17inch.html>

#### Apple MacBook Pro (17-inch, Mid 2010), 2.66GHz Intel Core i7

<http://www.apple.com/macbookpro/specs-17inch.html>

#### Where to Buy

<http://store.apple.com/>

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### GPU

#### ATI Radeon HD 5770 for Mac

<http://www.amd.com/us/products/desktop/graphics/ati-radeon-hd-5000/hd-5770/Pages/ati-radeon-hd-5770-overview.aspx>

#### NVIDIA GeForce GT 120 for Mac

[http://www.nvidia.com/object/product\\_geforce\\_gt\\_120\\_us.html](http://www.nvidia.com/object/product_geforce_gt_120_us.html)

#### NVIDIA Quadro 4000 for Mac

<http://www.nvidia.com/object/product-quadro-4000-mac-us.html>

#### NVIDIA Quadro FX 4800 for Mac

[http://www.nvidia.com/object/product\\_quadro\\_fx\\_4800\\_for\\_mac\\_us.html](http://www.nvidia.com/object/product_quadro_fx_4800_for_mac_us.html)  
<http://www3.pny.com/NVIDIA-Quadro-FX-4800-For-Mac-P2815C409.aspx>

#### Where to Buy

<http://store.apple.com/>

## Certified Components

### Software

#### DaVinci Resolve for Mac

<http://www.blackmagic-design.com/davinci/>

#### DaVinci Resolve DNxHD Update

<http://www.blackmagic-design.com/davinci/>

#### Where to Buy

<http://www.blackmagic-design.com/resellers/>

#### Apple Final Cut Studio

<http://www.apple.com/finalcutstudio/>

#### Apple Xsan

<http://www.apple.com/xsan/>

#### Where to Buy

<http://store.apple.com/>

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### Control Panel

#### DaVinci Resolve Control Surface

<http://www.blackmagic-design.com/davinci/>

#### Where to Buy

<http://www.blackmagic-design.com/resellers/>

#### JLCooper's Eclipse CX

<http://www.jlcooper.com/pages/eclipse.html/>

#### Where to Buy

[http://www.jlcooper.com/cgi/jlcshop\\_ns.cgi?task=purch/](http://www.jlcooper.com/cgi/jlcshop_ns.cgi?task=purch/)

#### Tangent Devices WAVE

[http://www.tangentdevices.co.uk/products\\_wave.asp](http://www.tangentdevices.co.uk/products_wave.asp)

#### Where to Buy

[http://www.tangentdevices.co.uk/reseller\\_list.asp](http://www.tangentdevices.co.uk/reseller_list.asp)

## Certified Components

### Monitor

#### Apple LED Cinema Display 27"

<http://www.apple.com/displays/>

#### Where to Buy

<http://store.apple.com/>

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### Capture Card

#### Blackmagic Design DeckLink HD Extreme 3D+

<http://www.blackmagic-design.com/products/decklinkhdextreme/>

#### Where to Buy

<http://www.blackmagic-design.com/resellers/>

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### RED r3d Processing Card

#### RED Rocket

<http://www.red.com/>

#### Where to Buy

<http://www.red.com/store/775-0001>

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### USB 2.0 Extender

#### Gefen EXT-USB2.0-LR

[http://www.gefen.com/kvm/dproduct.jsp?prod\\_id=5529](http://www.gefen.com/kvm/dproduct.jsp?prod_id=5529)

#### Where to Buy

[http://www.gefen.com/kvm/dproduct.jsp?prod\\_id=5529](http://www.gefen.com/kvm/dproduct.jsp?prod_id=5529)

#### USB2.0 Ext from Z-Tek

<http://www.viewcon.net/main/prodshow.asp?ProdId=650>

#### Where to Buy

[http://www.ebuyph.com/PictureShow.asp?P\\_ID=1077](http://www.ebuyph.com/PictureShow.asp?P_ID=1077)

## Certified Components

### Direct Attached Storage

#### CalDigit HDPro2

<http://www.CalDigit.com/HDPro2/>

#### Where to Buy

<http://www.caldigit.com/store.asp#HDPro2>

#### OWC Multi-Mount

Model: 3.5" to 5.25" bracket set for 2009-2010 Mac Pro "Nehalem"

<http://eshop.macsales.com/item/Other%20World%20Computing/MM52T35MP9/>

#### OWC Multi-Mount

Model: 3.5" to 5.25" bracket and cable set for 2006-2008 Mac Pro

<http://eshop.macsales.com/item/Other%20World%20Computing/MM52T35MP8/>

#### Where to Buy

<http://eshop.macsales.com/owcpages/multimount/multimount.html>

#### Rorke Data Galaxy Aurora, 24 Bay RAID

<http://www.rorke.com/aurora.cfm>

#### Where to Buy

<http://www.rorke.com/contact-sales-form.cfm>

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## HBA

#### Apple Dual-Channel 4Gb Fibre Channel PCI Express Card

<http://store.apple.com/us/product/MB842G/A?mco=MTY3ODQ5OTY>

#### Apple Mac Pro RAID Card

<http://www.apple.com/macpro/features/storage.html>

#### Where to Buy

<http://store.apple.com/>

#### ATTO 4Gbps Dual Channel PCIe Fiber Channel HBA

Model: CTFC-42ES-ORO

<http://www.attotech.com/products/product.php?scat=2&sku=CTFC-42ES-ORO>

#### Where to Buy

<http://www.attostore.com/fibre-channel-hbas/4gb-celerity-fc-42es.htm>

## Certified Components

### PCI Express Expansion

#### **CUBIX GPU-Xpander Desktop 2**

<http://www.cubixgpu.com/Products/Desktop/>

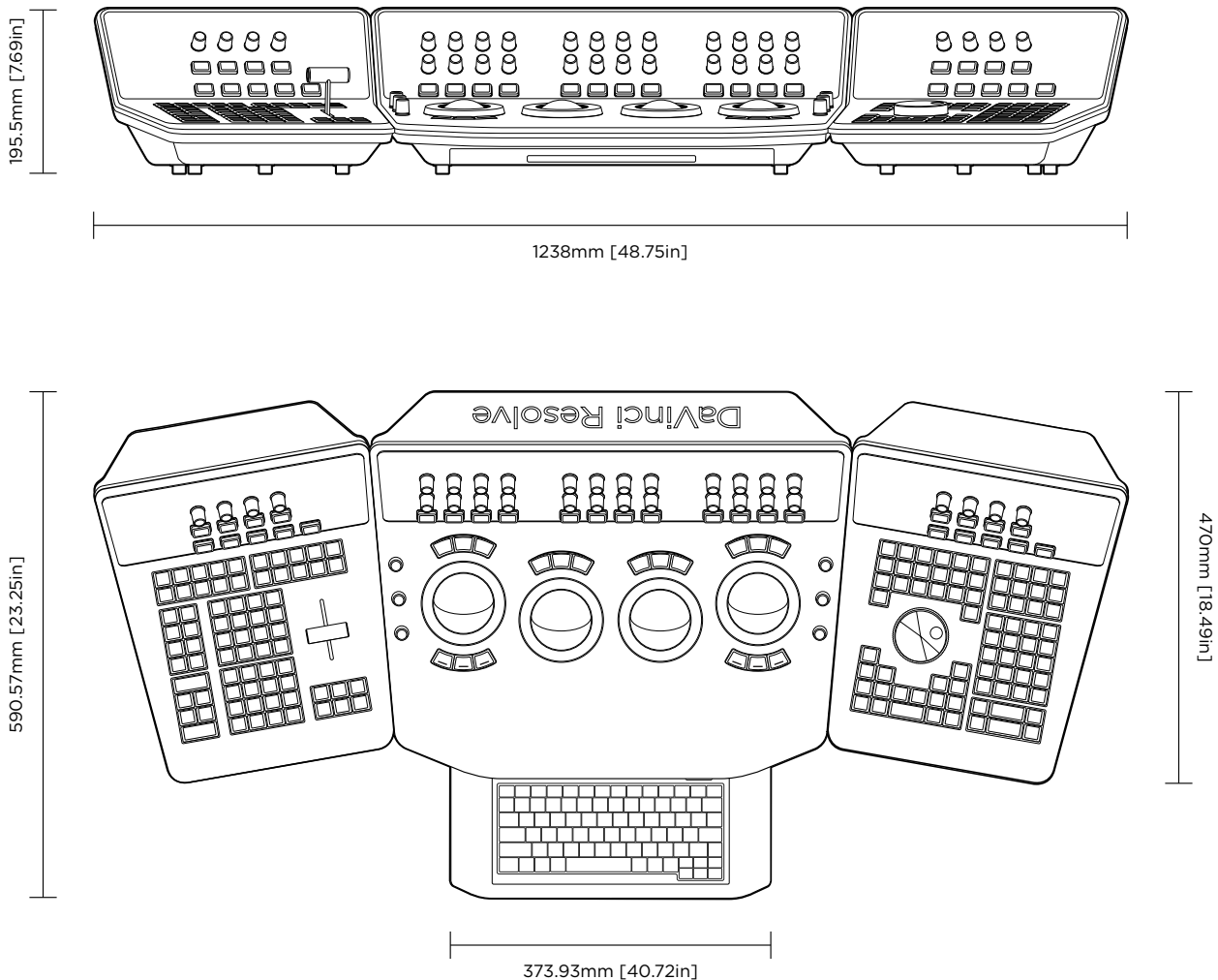
#### Where to Buy

<http://www.cubixgpu.com/Online-Store>

# DaVinci Resolve Control Surface

## Dimensions and Weights

	HEIGHT	WIDTH	DEPTH	WEIGHT
CENTER PANEL	195.5mm (7.69in)	574.1mm (22.60in)	460.7mm (18.14in)	12.2kg (26.9lb)
LEFT PANEL	195.5mm (7.69in)	333.5mm (13.13in)	421.8mm (16.60in)	4.8kg (10.6lb)
RIGHT PANEL	195.5mm (7.69in)	333.5mm (13.13in)	421.8mm (16.60in)	4.8kg (10.6lb)



# Warranty

## 12 Months Limited Warranty

Blackmagic Design warrants that DaVinci Resolve control surface will be free from defects in materials and workmanship for a period of 12 months from the date of purchase. If a product proves to be defective during this warranty period, Blackmagic Design, at its option, either will repair the defective product without charge for parts and labor, or will provide a replacement in exchange for the defective product. Periodical updates to the operational software are not included under this warranty.

In order to obtain service under this warranty, you the Customer, must notify Blackmagic Design of the defect before the expiration of the warranty period and make suitable arrangements for the performance of service. The Customer shall be responsible for packaging and shipping the defective product to a designated service center nominated by Blackmagic Design, with shipping charges pre paid. Customer shall be responsible for paying all shipping charges, insurance, duties, taxes, and any other charges for products returned to us for any reason.

This warranty shall not apply to any defect, failure or damage caused by improper use or improper or inadequate maintenance and care. Blackmagic Design shall not be obligated to furnish service under this warranty: a) to repair damage resulting from attempts by personnel other than Blackmagic Design representatives to install, repair or service the product, b) to repair damage resulting from improper use or connection to incompatible equipment, c) to repair any damage

or malfunction caused by the use of non Blackmagic Design parts or supplies, or d) to service a product that has been modified or integrated with other products when the effect of such a modification or integration increases the time or difficulty of servicing the product. THIS WARRANTY IS GIVEN BY BLACKMAGIC DESIGN IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED. BLACKMAGIC DESIGN AND ITS VENDORS DISCLAIM ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. BLACKMAGIC DESIGN'S RESPONSIBILITY TO REPAIR OR REPLACE DEFECTIVE PRODUCTS IS THE WHOLE AND EXCLUSIVE REMEDY PROVIDED TO THE CUSTOMER FOR ANY INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES IRRESPECTIVE OF WHETHER BLACKMAGIC DESIGN OR THE VENDOR HAS ADVANCE NOTICE OF THE POSSIBILITY OF SUCH DAMAGES. BLACKMAGIC DESIGN IS NOT LIABLE FOR ANY ILLEGAL USE OF EQUIPMENT BY CUSTOMER. BLACKMAGIC IS NOT LIABLE FOR ANY DAMAGES RESULTING FROM USE OF THIS PRODUCT. USER OPERATES THIS PRODUCT AT OWN RISK.

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