



SYSTEMS



SOFTWARE



TRAINING



DVC.UK.COM

SYSTEMS SOFTWARE AND TRAINING 2016

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Please note:

We always endeavour to answer telephone calls straight away but we do find that many calls we receive are long and complicated (most people have quite a few questions to ask and we always try to help!). So we may not be able to talk to you immediately or it may not be possible to connect you to a suitably qualified member of staff when you call. However, we will take your name and number and we will always ring you back.

Updated: 21st June 2016

DVC - SYSTEMS, SOFTWARE AND TRAINING

This booklet is produced in house at DVC and represents our view of the products listed.

The aim is to give you as much information as possible so that you can make an informed choice as to which products suit you.

SYSTEMS

If you get an editing computer from DVC you are buying not only the hardware, but the peace of mind associated with knowing the computer has been set up and tested as an edit system. If it fails to edit properly, we have to sort it out for you. If you buy software and hardware from different sources you do not get anywhere near the same level of support.

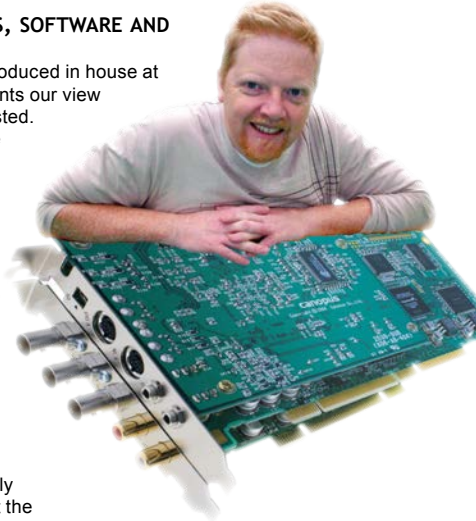
SOFTWARE

There is more information available on our website, www.dvc.uk.com and, of course, please feel free to ring us on **01273 205700**, email sales@dvc.uk.com to discuss your requirements, or why not come to our offices in Brighton for a demo.

TRAINING

We have a range of training courses and DVDs, based on **Adobe Premiere Pro**, **Adobe Encore**, **Grass Valley EDIUS** and **Avid Media Composer**. Details of these courses and DVDs appear at the end of this booklet.

All training courses are run by DVC Managing Director, David Clarke, who is a certified **Grass Valley Silver trainer**, and has been editing with computer based systems since 1994 and Adobe Premiere 1!



Adobe



Prices quoted in this brochure were correct at time of going to press. All prices are subject to variation. If you are interested in purchasing any of the items listed in this brochure then please ring us for an up to date quote. Errors and omission excepted.

WHICH EDITING SYSTEM IS RIGHT FOR YOU?

The decision of which system to buy is not an easy one. None of the editing programs we sell are really awful and we could give you a sales pitch on any of them that makes them sound brilliant. So which do you choose?

DO YOU ALREADY LIKE A PARTICULAR PROGRAM?

If someone comes to us and says "I have been using Premiere 6 and I like it which should I choose?". We would say **Premiere Pro**, as it is the closest to Premiere 6. Other programs, like **Grass Valley EDIUS** are similar, whereas **Sony Vegas** and **Avid Media Composer** are different. All programs edit video following the same general logic so there are many similarities but an update of the program you have already been using is normally the closest match. There are exceptions of course - Final Cut Pro X is considerably different to its predecessor Final Cut Pro 7, and in fact Adobe Premiere Pro is probably closer to the way FCP7 worked than FCPX.

WHAT IS YOUR FILMING FORMAT?

These days all the programs support most formats, but some perform better than others. Grass Valley EDIUS and Adobe Premiere Pro support native AVCHD much better than other programs, for example. Grass Valley EDIUS, Sony Vegas and Avid Media Composer have STEREOOSCOPIC (3D) editing built-in, Adobe Premiere Pro does not.

REALTIME EFFECTS

Realtime effects are very useful and can make your editing much easier because they give you freedom to experiment and see the changes without wasting time rendering. They are not the be-all and end-all, as there are many cool effects you may want to achieve that can only be done by rendering.

Adobe Premiere Pro, Sony Vegas and Avid Media Composer have ways of achieving more in realtime by adding extra hardware (normally the right kind of graphics cards). Grass Valley EDIUS is not really improved much by using the right kind of graphics cards as it works really well just using your computer's processor; in fact EDIUS works so well that it will rival a program like Adobe Premiere Pro for realtime performance when the latter is souped up by an expensive graphics cards!

This means, if editing on a laptop, where you cannot install extra hardware, Grass Valley EDIUS may be the best choice for speed.

INTEGRATION WITH OTHER PROGRAMS

Maybe you are not sure which editing program you want, but you use **Adobe After Effects** a lot. Then Adobe Premiere is first choice as Premiere and After Effects talk to each other really well. This does not mean you cannot use After Effects with the other programs but none of them integrate as well as Premiere and After Effects.

DVD & BLU-RAY WRITING

All the programs do a good job of encoding video for DVD & Blu-ray but some have more options than others which may sway you in favour of one program or another.

For example, **EDIUS** can use **INTEL QUICK-SYNC** to make a Blu-ray disc fast (an hour disc could be made in 20 minutes) so if you are making a lot of Blu-ray discs then EDIUS may save you huge amounts of time.

LAPTOP OR DESKTOP?

These days laptops are powerful enough to edit even HD footage. Our latest 2011 pin i7 laptop can have 3x1TB of hard drive space installed, with a decent graphics cards, a full HD screen and even a Blu-ray writer.

Most laptops are not as powerful as desktops - even though these days laptops can have **8 core processors** similar to desktop computers, processing power has to be balanced against decent battery life. We do have one laptop which uses desktop processors and is as powerful as a desktop - although the battery life is not good.

The big advantage is the laptop can be moved around and the desktop is pretty static. If all you need is a system that sits in one place then buy a desktop - for the same price it will be more powerful and cheaper to fix if something goes wrong.

But if you need a movable system then choose a laptop and you will still be able to edit fast.

MAC OR PC

At DVC we specialise in PCs. We can sell Macs but prefer PCs. Apple are currently concentrating on laptops, IPADS and IPHONES which means their desktop machines are not using the same fast processors as PCs. For the same money a PC will be faster than a MAC. This does not mean that MACs are slow, so if you like MACs then stay with them, but an up-to-date PC will be faster.

Most editing software and hardware will work on both platforms. Avid and Adobe software is completely cross platform and it is possible to switch from a MAC version to a PC one. EDIUS and Vegas ONLY work on PC. They will work on a MAC either using Boot Camp (where you turn the MAC into a PC) or Parallels - although when using Parallels not every thing works properly.

HOW MUCH MONEY HAVE YOU GOT?

Unfortunately in the real world very few people have unlimited resources, so your system will always be defined by your budget. We have built editing computers costing from £1,000 - £15,000, but as computer prices change so quickly call us with your requirements on **01273 205700** and we will attempt to fit those requirements to your budget. At DVC we find out what you need and then advise you on the best system to suit you, we don't try to sell you the most expensive box unless you actually need the features it offers.



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OUTPUT

MAKING BLU-RAY

All the editing programs can make Blu-ray discs and the process is pretty much the same as making DVDs. Blu-ray writers are also cheap - now available for under £100.

Blu-ray discs are either 25GB (single layer) or 50GB (dual layer). You can also make a Blu-ray style disc on a DVD although you get less footage on this and they are still only playable in a Blu-ray player or a computer. Printable Blu-ray blanks are now about £1 each.

VIDEO FORMATS FOR BLU-RAY

Blu-ray can be in different formats - DVDs are made in MPEG2, Blu-ray can be made in MPEG2, H.264 (the same format as AVCHD video) and VC1. Most programs will make either MPEG2 (take a lot of space but fast to make) or H.264 (slower to make but you can fit more on a disc in better quality). You can get extra devices such as a **Matrox Compress HD** to speed up the encoding. Grass Valley use a feature built into the latest computer processors, INTEL Quick Sync, to let you make a 1 hour Blu-ray file in 20 minutes.

SPECIAL BLU-RAY FEATURES

Most programs make Blu-ray discs like DVDs. Only **Adobe Encore** can make special **Blu-ray-style pop up menus**.



DISC COMPATIBILITY

The quality of blank Blu-ray discs is variable. With cheap discs we have had playback problems. Use the best discs and you will be OK.

AUTHORING SOFTWARE

We have two comprehensive programs: - **Sony DVD Architect** and **Adobe Encore**. You can only get Encore by renting the Creative Cloud version of Premiere Pro, where as you can buy Architect outright; as Encore is not getting any further development it is silly to pay every month to use it unless you are also using Premiere Pro.

You can also write Blu-ray discs off the timeline in **Sony Vegas** (discs with no menus) and **Grass Valley EDIUS** (disc with video menus).

WHY DO I NEED AN OUTPUT DEVICE?

Whenever we sell a system we recommend that you have an extra device to output the picture to a TV when editing. Why?

- To see the image as it will be on your final DVD or Blu-ray disc so you do not get any sudden surprises.
- To see changes to colour or exposure changes as you make them; you need to know if the picture is properly in focus;
- To see the edges of an effect, like a title or chromakey properly. You cannot judge this properly on a small overlay on a computer screen.

You have two options:

USING TWO COMPUTER SCREENS

You can run two screens from most graphics cards and all the programs have options to run the edit full screen on one of these. You can attach a proper HD screen via HDMI and set it up to the correct frequency etc..

ADVANTAGES

- 1) Since you are just using the computer software systems used this way tend to be **very stable**.
- 2) It is **cheaper** than buying an output device.

DISADVANTAGES

- 1) It **never looks quite the same** as TV output. You can spend ages fiddling and get something pretty close.
- 2) Computer screens work in **RGB**, video works in **YUV**, which means the brightness levels are not quite right and the colour looks slightly different to a TV.
- 3) Most screens will only work at **60Hz not 50Hz**, so the picture tends to jerky slightly.
- 4) Unless you get a really good graphics cards moving pictures **tend to tear** slightly.
- 5) Most computer screens work in **progressive mode** so do not show interlace problems very well.

USING AN OUTPUT DEVICE

You add in an extra gizmo to output video for you. This is a device from Blackmagic. AJA or Grass Valley depending on your program.

ADVANTAGES

- 1) **Easy to setup up** and get a picture that looks the same as the original.
- 2) You know the device is **designed for video** - often you have calibration tools to help set up the output screen.
- 3) Nearly all these devices let you **capture footage** in as well, either SD or HD.
- 4) These devices also give you output from other programs like **After Effects** and **Photoshop**.
- 5) Extra hardware on the devices can **accelerate encoding** to different formats or do **realtime down-scaling**.

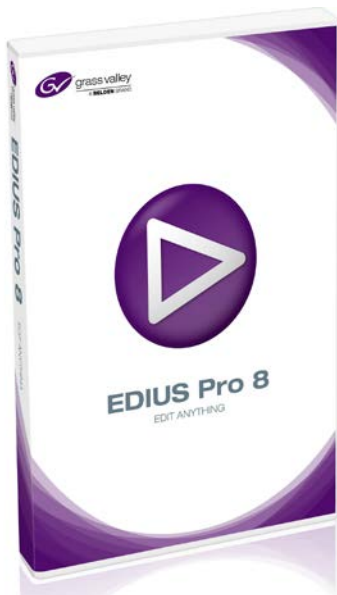
DISADVANTAGES

- 1) The computer will work hard which *could* mean more **crashes**.

DIFFERENT EDITING PROGRAMS

At DVC we don't sell all the editing programs available, just the ones that we think are the best. There are many different things that will influence your decision - with all the different formats of video available it may be as simple as whether or not your chosen program supports the format you film in. Or it could be important how it integrates into DVD writing or effects programs, or how good it is for off-line editing.

	For	Against
<p>GRASS VALLEY EDIUS Easy to use, responsive and stable. PC ONLY</p>	<ul style="list-style-type: none"> • Very stable - we rarely have a crash with EDIUS. • The best realtime performance of all the editing programs. All the effects are good quality as well, with the best realtime chromakey and realtime Keyframable slow motion • Good at mixing formats on the timeline. • Supports practically all forms of HD and SD footage, generally the first to support new formats. Quick ways of bringing footage in and copying it from camera to PC without even leaving the program. • Simple DVD & Blu-ray writing built-in, which does nearly everything most people need. • The BEST stereoscopic editing support. 	<ul style="list-style-type: none"> • If the built-in DVD writing is not enough then you need something better - which will probably be Sony DVD Architect. • No surround sound mixing - although EDIUS can <i>make</i> surround sound files & discs.
<p>ADOBE PREMIERE PRO The most common program - realtime effects if you add the right graphics cards. One of the first 64bit editing programs. MAC and PC</p>	<ul style="list-style-type: none"> • Integrates very well with the whole Adobe suite, Encore, After Effects, Audition and Photoshop. • Supports a huge range of video formats natively - i.e. copy off the camera and use them straight away! • Excellent support from other companies, like Blackmagic and AJA to add extra inputs and outputs. • Huge number of useful features and filters built-in. • Mercury Playback Engine means huge realtime performance with the right graphics cards. • Edit audio down to the sample level and 5.1 surround sound mixing. • If you have been using Adobe Premiere, even the NOT PRO versions, it is the closest to the program to which you are used. 	<ul style="list-style-type: none"> • You have to rent Premiere Pro via the Creative Cloud, there is no option to buy it with a one off payment. • You computer has to go on the internet once a month to keep the licence going. An offline option is available but only for selected users. • Audio conforming is a pain if moving projects between computers
<p>SONY VEGAS Sony's program is half effects program, half editing program.. PC ONLY</p>	<ul style="list-style-type: none"> • Comprehensive support for STEREOSCOPIC editing, either from 3D cameras or using a rig. • High end compositing features like Keyframable mattes and proper 3D space for effects built-in. For doing more complex effects you don't need to learn a different program. • Tight integration with DVD Architect for DVD and Blu-ray writing • Excellent sound editing with 5.1 encoding and mixing. • Accelerated encoding and realtime playback of effects using a graphics cards (either nVidia or ATI) 	<ul style="list-style-type: none"> • Quirky interface - if you drag out a clip beyond its end point it automatically loops! • Recently sold by Sony to German company Magix. They say they will be producing an updated version later in the year, but we have yet to see what is going to happen.
<p>AVID MEDIA COMPOSER It's Avid - the industry standard - Media Composer is the program used to edit nearly every movie! Commonly referred to as MC. Now 64bit. MAC and PC</p>	<ul style="list-style-type: none"> • Excellent compatibility with full Avid suites for off-line editing. • Lots of realtime effects even live to DV; realtime HD-SDI and HDMI out with AJA or Blackmagic cards. • Excellent media management - the best for organising your projects, collaborating with others and moving around huge amounts of media. • Loads of features - many of which you never even knew you wanted and all honed into useful tools by years of experience and feedback. • Good integration the industry standard audio editing tool, ProTools. • Huge plug-in support. 	<ul style="list-style-type: none"> • It's an "everyday users" program - if you are an occasional user you will forget how to do things. • With AMA you can just link to files and start editing but this does not work as well as Premiere or EDIUS • No DVD/Blu-ray authoring program is included with the current version..



EDIUS PRO AND EDIUS WORKGROUP

With EDIUS 8 there are two versions of EDIUS 8 - EDIUS Pro and EDIUS Workgroup. The two versions are very similar. EDIUS Workgroup has the following additional features:

- **Connect to external storage via FTP**
- **Avid DNxHD support for MXF files** - available as an option for Pro, built in to Workgroup. This was also option for EDIUS 7 Pro
- **Connect to Stratus**, connect to K2 SAN.
- **Dolby E pass through** - if the files have Dolby-E then this is passed through without re-encoding
- **ANC Data (captioning) pass through.**

The following are features that were in EDIUS Pro 7 and are now only in EDIUS Workgroup so you will lose these features if you upgrade from EDIUS Pro 7 to EDIUS Pro 8. If you need these features you should upgrade to EDIUS Workgroup 8:

- **Audio monitoring mode** - lets you monitor multi-channel audio on 2 speaker system.
- **EDIUS watch folders** - Tell EDIUS to keep an eye on a folder on your computer and anything which is dropped into that folder appears in the EDIUS bin.
- **Edit growing files** - edit files as they are captured.
- **Loudness monitoring** - EDIUS will play the timeline and tell you where it does not meet certain loudness standards.
- **Generic MXF exporter** - EDIUS Workgroup will export files in MXF format, EDIUS Pro will not, although EDIUS Pro will make XDCAM-EX style MXF files.

EDIUS' major strengths are the speed of the editing, its reliability and the realtime performance. It is probably true to say you could do a job faster and more reliably in EDIUS than any other editor.

EDIUS not only has excellent editing functionality but also has many advanced compositing features built in including animatable, feathered masks. Its realtime performance is also excellent, only match by Adobe Premiere Pro and their MERCURY PLAYBACK ENGINE (which requires a specific graphics cards, where as EDIUS' performance is totally dependant on the CPU).

FASTEST FOR BLU-RAY AND MP4

EDIUS is the fastest program for making Blu-ray discs or MP4 files because it supports Intel's Quick Sync technology found on their Sandybridge, Skylake & Haswell processors.

LATEST VERSION - EDIUS 8

EDIUS 8 shipped at the end of June 2015. The new version had a streamline interface, and a new program called the GV Browser for cataloguing footage. Grass Valley have promised they will add more features over the next two years at not extra cost if you have bought EDIUS 8.

STABILITY

One of the biggest advantages for EDIUS is its stability. To say you will never have a crash is not something we would like to promise, however, many of our customers say just that!

- **Dolby Pro licence option** - Add a Pro version of Dolby encoding. This was an option for EDIUS Pro 7, it did not ship with EDIUS 7. Now it is only an option for EDIUS Workgroup 8, you cannot add it to the Pro 8 version.
- **Some future updates may be for EDIUS Workgroup and not for EDIUS Pro.** With EDIUS 8 Grass Valley have said they will be adding new features to EDIUS during the life of EDIUS 8. EDIUS 9 is probably going to be available mid-2017 which means there will be several major updates to the program in the meantime. We have been told that there will be motion tracking in version 8.2 (due around April/May 2017), and LUT support, both of which we expect to be in both versions. Also promised sometime is an automatic loudness correction feature which we would expect to be in the Workgroup version ONLY, since the loudness meter is only in the Workgroup version..
- **Internet connection required for Pro** - with the pro version of EDIUS you have to connect to the internet once a month to validate the licence. You only pay for the software once - when you buy it - and do not pay every month. However, your machine must connect to the Internet once a month otherwise EDIUS will stop working and will not work again until the computer is connected to the Internet again.
- If your machine is always connected to the Internet then you do not have to do anything.
- If you do not want to put your computer on the Internet every month (some people do not like to connect their editing computer to the Internet at all) you have to buy the Workgroup version of EDIUS.



GRASS VALLEY EDIUS

EDIUS TITLE OPTIONS

VisTITLE

The best animated titling program for EDIUS, **VisTitle** lets you animate titles in 2D and 3D, draw objects, add glows and sparkles and much more. Most titling programs have their own ways of doing things - VisTitle's interface follows the same principle as EDIUS' own keyframing or Adobe After Effects, making it easy to use and very powerful.

£199+VAT £239 inc

NEWBLUE FX PRO TITLER

NewBlue titler can do animated titles, 3D text and a lot more. If you have some of NewBlue's other effects packages then these are also available in Pro Titler. VisTitle has more features, NewBlue's titler is possibly easier to use.

£207+VAT £249 inc

PRODAD HEROGLYPH

Heroglyph creates still and animated titles. Its quirky interface is not to some people's liking but is easy to use once you are familiar with it.

£139 +VAT £167 inc



Previous versions of EDIUS came bundled with other software for advanced effects - EDIUS 8 does not. If you want to carry on using 3rd party plug-ins like NewBlue Effects range, you will need to buy new copies. Title Motion Pro, for many years bundled with EDIUS, also no longer works with EDIUS.

Intel Quick Sync

Intel have built H.264 encoding into their latest "Skylake" processors, which means you can make video in the right format for Blu-ray or MP4 files for upload to YouTube **very fast**. An hour of full HD video can be encoded in 20 minutes.

EDIUS is the only editing program currently to take advantage of this. With EDIUS Pro and Workgroup and the right kind of computer every Blu-ray disc or MP4 file you create is made in record time.

The important thing is to get the right processor and motherboard and to set the system up correctly. Our own brand laptops will also take advantage of this ability (see our laptop section for more information).

There is a lot more information on our website, including videos and comparisons of the encoding speed between EDIUS with Quick Sync and other editing programs.

To get the best performance you really need to have 2 computer screens attached to your PC in the correct configuration (if you buy the system from us it is all easily explained)



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EDIUS' range of realtime effects is large - many are effects that you will use all the time. Only colour corrections and DVEs are Keyframable, although it is possible to use the **blend effects** option to fade the effect in and out over time which gives a similar effect to keyframing. Apart from being realtime all are of high quality.



THREE WAY COLOUR CORRECTOR

This keyframable colour correction filter is great for grading shots, mostly achieved with just a couple of clicks, using the automatic options. A split screen view allows you to compare the balance of your current clip to another clip or the uncorrected shot.

As one customer recently put it "The dipstick on the camera left the white balance on out doors for an indoor shot. The Three Way Colour Corrector sorted it out with one click. Brilliant!"

PRIMARY COLOUR CORRECTOR

A new addition in EDIUS 8, this lets you add pre-made LUTs, and gives you very accurate control over the look of an image. It does not have the automatic options of the 3 way CC, but does give you a lot more control for "intense" grading..

PICTURE IN PICTURE

As you would expect EDIUS can do 2D and 3D picture in picture. It also has several quality options so you can use the best quality scaling available - Lanczos - directly inside the editing program. This means better picture in picture effects and better conversion from HD to SD and vice versa.

SLOW MOTION

The EDIUS' slow motion is lovely quality with decent frame blending, which it does in realtime. Speed changes are Keyframable too using **TIME-REMAPPING**, also realtime.

MASK FILTER

Define an area - an ellipse, square or a hand-drawn mask, add soft edges, and apply an effect to just this area, or use it to make certain areas transparent. The mask can be keyframed so that you can follow and item around screen. This allows you to do proper **rotoscoping** - a feature Premiere users do not get without buying After Effects.

MOTION TRACKING IN MASK

You can get EDIUS to track a mask across the screen

for either applying and effect to a moving area or making a section transparent.

OLD MOVIE

The filter should really be called Film Effects because apart from adding dust, scratches, edge darkening, jitters and just about everything you need to make your footage look like it was filmed years ago, you can also use it to de-interlace the footage to give it a film effect, or add a small amount of grain.

BLEND MODES

A variety of different ways of overlaying an image, such as: addition, colour burn, colour dodge, difference, exclusion, multiply, screen, soft light, subtract and more...

EDIUS STABILISER

Take a wobbly shot and stabilize it quickly. All the programs now have a stabiliser built in but the EDIUS one is fast and can analyse quickly in the background while you work. Any scaling needed can be done in the best quality thanks to the Lanczos scaling.

CHROMAKEY

A very good, high quality, realtime Chromakey, this filter takes a colour and replaces it with a background image. Getting a decent key from DV and HDV is difficult, because of the way they handle colour, but this filter manages a good result practically every time.

3D TRANSITIONS

We may scoff at wacky 3D transitions but if your clients want them you need to have them. EDIUS has a huge range of realtime transitions including object wipes and exploding effects, all thoroughly customisable. With other programs you have to pay extra to add these kinds of effects.

PROXY MODE & REDUCED RESOLUTION PLAYBACK

EDIUS is great at playing back effects in realtime (i.e. without rendering) but sometimes things are so complicated it just can't play them back.

EDIUS has two ways of dealing with this problem. In EDIUS Workgroup you can drop the playback resolution of the timeline and clips will playback that would not previously.

In EDIUS Pro and Workgroup there is a proxy mode which makes low resolution versions of clips and uses these for playing effects.

JUST KEEP PLAYING

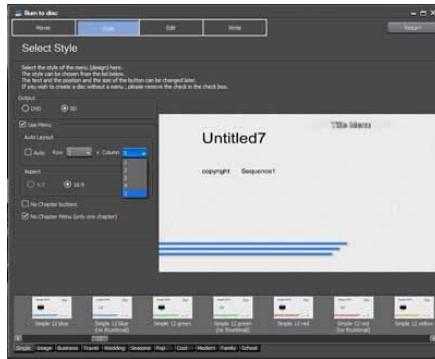
One of EDIUS' strengths is its realtime performance. Stack up loads of effects and it will probably still playback in realtime, even with HD.

But it goes further - EDIUS will keep playing clips while you adjust the parameters, with the effects window open. This is a great time-saver - in other programs you adjust a parameter, play, adjust again, then play etc... Even worse you may have to open the effects box, adjust something, close the box, then play. No so with EDIUS..

EDIUS' SPECIAL FEATURES

- **Rip footage off DVD or Blu-ray discs for re-editing.** This is a hugely requested feature and most programs don't do it. EDIUS shows you a list of all the video clips and copies them onto the hard drive.
- **Rip tracks of audio CDs**
- The **source browser** shows you clips from card based cameras and copies them straight into your bin as well as off the card and on to the computer!
- **Batch encoding** - load up several timelines and encode them to different formats one after another.
- **Show the video's date and time information** - and you can print it into the final video as well.
- **Easy to use multi-camera mode.** The EDIUS version is easy and can be compressed to add transitions.
- **DVD & Blu-ray writing built-into the program.** Making the disc is quick!
- Intel Quick Sync support for fast Blu-ray encoding.

DVD & BLU-RAY IN EDIUS



EDIUS has simple DVD & Blu-ray writing included. Add markers to the timeline and they become chapter markers on your disc. The marker name becomes the chapter heading on the menu. You can use different sequences in the project or clips on your computer. EDIUS DVD/Blu-ray discs will have a main menu and then a chapter menu for each timeline with chapters.

EDIUS supports still and video menus, which you can customise using an EDIUS sequence as the background, changing pictures, frames text and backgrounds.

You can burn the timecode of the footage or the date & time it was recorded directly onto the DVD, and you can choose whether the menu remote buttons will work or not for particular assets.

Support for Intel Quick Sync means on the right computer making Blu-ray discs is really fast - faster than any other program we have.

You can make competent DVDs very quickly using EDIUS disc writing. Programs like Adobe Encore and Sony DVD Architect are more customisable and you can make the disc do exactly what you want, but layout and building would not be as quick.

Of course, there is nothing to stop you editing with EDIUS and making the DVD with another program. You can encode timelines using Intel Quick Sync very quickly into a Blu-ray file which you can then load into Encore (CC or above) to add menus etc..

BETTER BLU-RAY WRITING WITH EDIUS?

If the built-in DVD writing is not enough, what program is your best choice?

There are two possibilities: Adobe Encore and Sony DVD Architect.

Sony DVD Architect - much more comprehensive. You can only buy it with Sony Vegas so you get another video editing program thrown in. However, Vegas will give you good sound editing and surround sound mixing, which you can then author in DVD Architect

Adobe Encore CS6 - possibly our favourite Blu-ray and DVD writing program, but it is only available with Adobe Premiere Pro. You can only rent the software via the Creative Cloud for about £17 per month.. Adobe have also said they have stopped developing Adobe Encore and it will never have any updates.

SONY VEGAS



Vegas 13 was released in May 2014 and is a very comprehensive editing program. It has not been updated since then and Sony appear to be devoting their efforts to Sony Catalyst - a similar but currently inferior program. This does not stop Vegas Pro 13 being very powerful. There are two versions of the full version of Vegas - Vegas EDIT and Vegas Pro. Both

have the same editing program - Vegas Pro includes Sony's excellent DVD and Blu-ray writing program, **DVD Architect**.

Vegas was one of the first programs to offer **STEREOSCOPIC** editing and is the only program

CAPTURE

You can capture through FireWire or using various different hardware boards from AJA or Blackmagic. Through Blackmagic cards it can capture HD as MJPEG, uncompressed or XDCAM-style MPEG.

EDITING

Editing is similar to other programs - clips are arranged in the **Media Pool** (the project window in other programs) and can be viewed in the **trimmer** (clip window). In the trimmer you can see the clip as a film strip with the complete sound waveform beneath the video (very nice). Editing can be like other programs, mark in and out points and drop on the timeline, although Vegas is more geared towards adding clips to the timeline and trimming afterwards.

EFFECTS

Vegas' effects are excellent. Vegas was doing realtime effects out to FireWire long before any



The main screens of Vegas - there are a lot of panels although they can easily be docked and undocked. You can save layouts too. You can see the surround sound panner, a collection of scopes which update in realtime, the primary colour correction filter, the timeline, the effects pallet, the trimmer (or clip window) and the main preview screen.

which can output a FULL HD QUALITY Blu-ray disc.

Vegas' interface is a little bit quirky and does not work quite like a standard editing program when trimming and editing.

Clips, or "events" as they are called, can be dragged out well past their end and then will either loop or freeze depending on your preference. This feature betrays Vegas' origins as a **sound sequencing program**. Like other Vegas quirks it is not necessarily a bad thing, just different to the norm.

other program even thought of it. There are various quality settings and you can preview effects at low, auto, good or best quality, meaning that you can always choose a setting where you see *something*. There is a long list of effects which includes excellent primary and secondary colour correction, good quality motion paths, and wacky effects like old movie, TV simulation, lens flares and glows.

Vegas even has media generators which can create moving background textures - very handy for the background of a DVD menu.



Vegas sometimes feels a bit like Adobe's compositing program **After Effects** with a bit of editing thrown in, rather than an editing program with effects. You can nest timelines within timelines, like every other modern editing program although Vegas does this by having each timeline as a separate project, rather than all in one project.

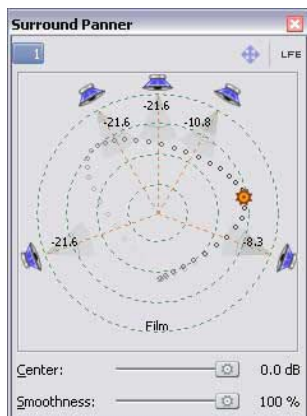
Vegas accelerates many of Vegas' effects using the graphics cards (it will work with either ATI or nVidia cards making it a bit more flexible than Adobe Premiere or Avid which insist on specific cards).

ANIMATED TITLES

Vegas comes with **ProType Titler** which can produce still or animated titles. You can animate titles on a line, or character by character, giving you huge amounts of control. With Premiere you would need to add a separate program or use After Effects to get this level of animation. It also comes with NewBlu Titler Pro which can do animated 3D titles.

SOUND

As Vegas started life as an audio editing program you would expect the sound editing to be excellent



and you will not be disappointed. The display of the sound waveform is accurate and once the "peak" file is written, takes no time at all to be updated as you zoom in or out. Vegas also supports proper surround sound mixing and, you can export this to **DVD Architect**, in proper **5.1 Dolby Digital**. This means you can get the surround sound on your DVDs at no extra cost (unlike Premiere Pro).

There is a large range of useful audio effects - and more are added if you buy Sony's sound editing application, **Sound Forge**. Quality is excellent especially with filters like pitch-shift - always a hard thing to get right. Vegas supports DirectX and VST effects on audio.

Vegas, like Premiere Pro, edits down to the sample level as opposed to the frame level, so you can get much more accurate positioning of your sound effects.

3D EDITING IN SONY VEGAS

Vegas can take two clips produced from a 2 camera rig or from a 3D camera and merge them into on proper 3D clip for editing. You can align the two shots, rotate, re-size and swap left and right if need. You have full control over the convergence on the clip and many other parameters.

Once you have created the clips you can monitor the 3D in various ways - the old fashioned blue and red filters, side-by-side or



any of the new 3D methods. You can use an nVidia graphics cards's 3D mode to monitor full HD.

Vegas also has a useful 3D filter which lets you adjust the "convergence" of any clip - even ones Vegas has made like titles. Using this we have made a title appear to come out the TV screen.

HD FORMATS

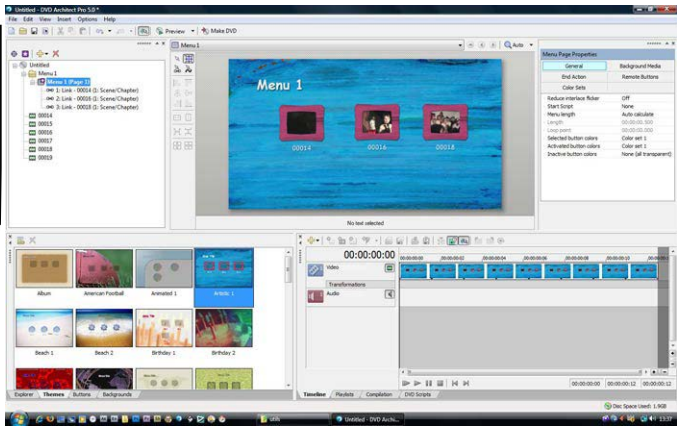
Vegas supports all variations of **HDV**, **Sony XDCam** and **XDCam-EX** and **AVCHD**. AVCHD editing is tough for any program and Vegas does a pretty good job. Adobe Premiere or Grass Valley EDIUS would achieve more in full quality in realtime.

The best way to monitor the video when editing would be to buy a **Blackmagic card** - like the **Intensity Pro 4k**. However Vegas only output pictures at up to HD resolution even with a 4K capable card. You can alternatively take over the second screen of your PC. This will never looks as good as a proper video output, although Vegas has colour profiles and other settings that will help.

BLU-RAY WRITING

Vegas can write a "video only" **Blu-ray disc**, with **no menus**, off the timeline, you can export to **DVD Architect** for full blown Blu-ray discs with menus.

SONY DVD ARCHITECT



DISC WRITING
DVD writing and Blu-ray is best handled by Vegas's companion program, **DVD Architect**.

SCRIPTING

If you have scripting you can usually achieve just about anything you want with your DVD. For example if you want a DVD with multiple languages use scripting so that all menus and audio tracks are chosen based on a user selection at the start of the disc. Encore does not support scripting, although some options normally achieved with scripting can be done in other ways with Encore.

DVD Architect's layout. The timeline has a nice waveform display at the bottom - a nice touch that helps when adding subtitles.

DIFFERENT VIDEO ANGLES

ENCORE VS ARCHITECT

These are our two favourite DVD and Blu-ray programs. How do they compare?

Both have a very similar feature set and the same level of customisation.

- Architect has scripting and different video angles - Encore does not.
- Encore integrates tightly with Photoshop, Premiere and After Effects - the Photoshop link makes customising menus a breeze!
- Architect takes chapters and subtitles from Vegas, but customising menus with Photoshop is more hassle.
- Encore is a bit more intuitive - Architect's interface is good but a bit more "dense".
- Encore makes multi-page Blu-ray pop-up menus - Architect does not.
- Encore can render video and audio in the background. Architect cannot.
- Encore has a great flowchart view for laying out DVDs.
- Architect accepts video as program or elementary streams and is less likely to want to remake something which is already in the right format for DVD - this does not happen often in Encore, especially not when encoding from Premiere, but has happened on some occasions.
- You can only rent Encore. You get Encore CS6 with Premiere Pro CC, but you have to pay every month or it stops working!.

Run two pieces of video at once and the user can switch between them using the angles button on the remote. This is tough to get right as you need to set the right settings for each piece of video. Thankfully, Architect does that really well.

CUSTOMISING AND OPTIMISING

Architect lets you change and customise everything in your DVD. It has an "optimise DVD" option which lets you set bit rates and size settings for each piece of video or just maximises the settings so they fit on disc. You can even change the order titles will be stored on the disc!

BLU-RAY

Architect makes Blu-ray discs in either MPEG or H.264 format, and at a variety of sizes just like Adobe Encore.

VEGAS INTEGRATION

Architect integrates very well with Vegas. In Vegas you can enter chapter points which are carried over to Architect and you can type subtitles in the Vegas timeline and these too can be carried over to Architect.

SHOULD YOU BUY IT?

Architect is a great authoring program and is now available on its own (previously you could ONLY buy it with Sony Vegas) This makes it the sensible add-on for users of Grass Valley EDIUS or Avid Media Composer..

DVD ARCHITECT: £135+VAT, £163 inc.



ADOBE PREMIERE PRO



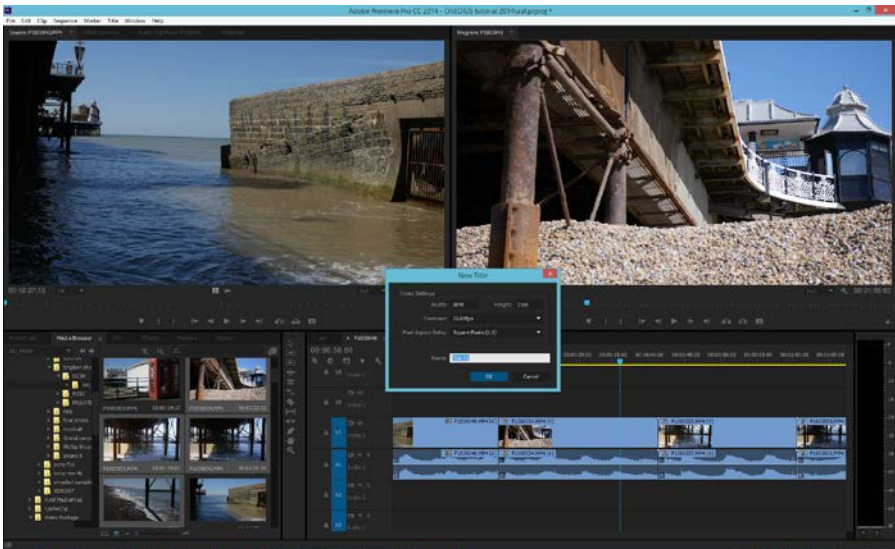
Adobe Premiere is one of the longest established editing applications - version 1 of Premiere was available when DVC started in 1995. It is packed with features, has a huge number of plug-in effects available, as well as extra hardware which can seriously enhance the software. Premiere Pro CC has a feature called the **Mercury Playback Engine**, which uses your graphics card to perform many effects in realtime - so you do a lot less rendering.

Premiere can edit practically any footage and you can mix and match different types on the same timeline. It always edits footage natively - i.e. as it came off the camera and

can perform really well even with hard-to-use footage like AVCHD. The only program with similar performance is Grass Valley EDIUS.

Premiere Pro's other major strength is the way it integrates with other Adobe applications such as Photoshop and After Effects. Premiere is available either in a bundle with Adobe Encore or in the "Creative Cloud suite", which includes Photoshop, After Effects, Audition and more.

The "**Dynamic Link**" between applications means you can take Premiere timelines, unrendered, and put them in Encore when making a DVD or Blu-ray disc. You can quickly jump into **Audition** for advanced audio tweaking, either of clips or whole timelines, and can do the same with **After Effects** - where you add effects and then drop the unmade After Effects composition straight back into Premiere. This integration is a great time-saver.



The main interface of Premiere Pro. This has had a revamp to make it more streamlined, with more area devoted to the picture, less clutter, and a better audio display. You can play clips in the bin or just move your mouse over the picture to preview the footage. Although it has changed it will still be familiar to owners of previous versions of Premiere Pro and even users of Premiere 6.

ADOBE CREATIVE CLOUD

The Creative Cloud is a subscription service for software where by you pay a fixed amount per month to use the software. If you stop paying then you can no longer use the software. .

ADVANTAGES OF USING CREATIVE CLOUD FOR TEAMS

There are several advantages to renting the software using Creative Cloud

- You get the latest version of the software
- * You get access to ALL the Adobe programs available
- * You can choose to rent just one program or all of the Adobe programs (essentially the old MASTER COLLECTION).

WEB STORAGE SPACE AND CLOUD FEATURES

You have access to 20GB of on-line storage space as well as several other cloud-based features designed for collaboration.

EASY ACTIVATION OF SOFTWARE

The Creative Cloud has some definite benefits over activation by serial number as with a perpetual licence (see below for more details information)

PRICE

This is the biggest incentive to join the Creative Cloud. Suppose you bought the Production Premium from Adobe and then upgraded every year, the cost would be as follows:

CREATIVE CLOUD

Assuming you are not getting a reduced price because you own a CS3 product or earlier the cost is :

For one year rental at £46.88 inc VAT per month - £468.80+VAT, £562.56 inc VAT.

THE DISADVANTAGES OF CREATIVE CLOUD

- If you stop paying you can no longer use the program
- * This is by far the biggest complaint about the Creative Cloud - you are committing to pay money to Adobe for ever. If you stop paying then you cannot use the software. This is indeed a drawback of the Creative Cloud. If this is something you are not prepared to accept then your choice is to stay with CS6 or use a different program. Adobe are convinced they are offering a big enough incentive for people to use the Creative Cloud to make it worth giving up the option to own the program.
- * Your computer needs to be connected to the Internet periodically to validate the licence.

ADOBE ENCORE HAS NOT BEEN UPGRADED TO A CC VERSION

Adobe Encore is available in the Creative Cloud

but has not been upgraded to a CC version. It still does everything it did in the CC version which made it our favourite DVD and Blu-ray authoring version, however, we believe the dynamic link between Encore and Premiere Pro will not work with Premiere Pro CC. We have not had this officially confirmed but it does seem to be the case. If you still want the dynamic link you will need to edit with Premiere Pro CS⁶.

YOU WILL BE ABLE TO DOWNLOAD AND USE OLD VERSIONS OF THE SOFTWARE WITH CREATIVE CLOUD

If you have a Creative Cloud subscription you can download ANY version of the software back to CS6. This is useful if collaborating with people who have not rented CC and are still using CS6..

WHAT'S TO STOP ADOBE GETTING EVERY ONE ON THE CREATIVE CLOUD AND THEN INCREASING THE PRICE?

The same thing which stopped them from increasing the price of the CS6 software astronomically - competition. There are alternatives for all the Adobe programs - maybe not feature for feature but certainly for the bulk of what they do. For editing you have EDIUS , Avid and Vegas; for compositing Boris Red and HitFX, for audio Sony Sound Forge and even the free Audacity. We cannot promise that Adobe will not slowly increase the price of course since we have no influence over them in such matters, but if they do they will lose customers to the alternatives.

WHY HAVE ADOBE DONE THIS?

In the first year Adobe were surprised at just how many people signed up to the Creative Cloud and as a result of it success they have decided to take a bold step and sell all their new products by the Cloud. Whether this works out for them or not we will tell in the fullness of time.

I DON'T LIKE HAVING ALL MY INFORMATION ON THE CLOUD - IT IS NOT SECURE

Although this is called the Creative Cloud you can, if you want to, ignore the on-line storage and other Cloudy options. At its simplest level you will need to go onto the internet to activate your account download the software. Then you will need to go on the Internet every month or so to keep your activation going. Apart from this you do not have to choose to have anything else on the Cloud. Adobe will introduce more Cloud-based options as they develop the software which you can choose to use or not as you wish.

ADOBE PREMIERE PRO

ACTIVATION AND INSTALL

CREATIVE CLOUD IS TIED TO AN ADOBE ID

With CC you do not get a serial number - instead you the activation is tied to your Adobe ID. To install you start an Adobe account, then download and install the software you want to use. In the process your Adobe ID is validated. If your machine is on the Internet you then completely ignore the validation and the computer will simply validate the licence every month automatically. If you are not on the Internet you will be prompted every month to validate the licence. If you do not validate you will have 30 days in which to do so - in other words you can still use the software for 30 days before it stops working. In this way you have plenty of time to get the licence validated.

ACTIVATION AND DEACTIVATION

As with a permanent licence you can have two machines activated at once. You are only allowed to use one of them at a time. You can deactivate the software on one computer and reactivate on another as many times as you like. If you install on a third computer and have not deactivated the software from your old computer then you can choose to deactivate all other computers using the software and activate the one onto which you have just installed the software. Next time you use the original computers you will be prompted to activate the software again within 30 days.

In this way you can move your activations around and you will never loose the activation (a common thing that happens with regular activation when your main hard drive dies).

SYNCING ON-LINE

You can save your settings and preferences for a program on-line and the sync other computers to these settings. This makes it easy to take your own settings with you wherever you go. You do not have to be using a computer activated with your Adobe-ID to sync settings - you can choose to sync settings from any Adobe ID when you are using the program. Currently we have only used this with Premiere Pro CC but it is available in other programs.

With Premiere CC's new ability to save auto saves on a different drive to the main program it is possible to use your Creative Cloud space for automatic project back ups.

For companies using an Adobe-ID for activation may be a pain since the person whose Adobe-ID it is may leave the company and take the activation with him. In this case you may be interested in Adobe Creative Cloud For Teams which handles activation of the software differently.

ADOBE CREATIVE CLOUD FOR TEAMS

There are two variations of Creative Cloud - regular Creative Cloud, designed for individuals and Creative Cloud for Teams, which is designed for business who need to use multiple versions.

Creative Cloud for Teams is designed for companies rather than individuals and has a couple of advantages over the regular Creative Cloud:

- * The main advantage is that the licenses are assigned by a central controller at your company and can be re-assigned easily. Regular Creative Cloud is assigned to an Adobe ID and if the person with that ID leaves the company the software licence goes with them. With Creative Cloud for teams this is not the case which makes it easy for the company to reassign licenses when people join and leave the company.
- * Creative Cloud for teams gives your more on-line disc storage space.
- * You get access to two "high level" support calls per licence - which means you get to a more experienced support person at Adobe than with the regular Creative Cloud. Of course if you buy Creative Cloud for Teams from us at DVC you get access to our experienced support team as many times as you like.

Creative Cloud for Teams is available for individual products or for the entire suite. You can buy Creative Cloud for Teams from us at DVC. You can only buy the "regular" Creative Cloud direct from Adobe.



EFFECTS

One area where Premiere excels is the range of effects - not just with the range of built-in effects, which is large, but also with the range of plug-ins available. We cannot list everything available so here is a sample:

- **Keyframable slow motion**
Start playback at one speed and slow down or speed up at a different point. This is accessed through the timeline and is quick to use. Alternatively you can send clips to After Effects for better quality.
- **Optical flow slow motion**
In the latest versions of Premiere Pro you can add optical flow slow motion which can create very smooth slow images from regular footage. This was previously only available in After Effects.
- **Colour adjustments** - there are a whole host of filters for adjusting video levels and colour balance. Particularly useful are: the **levels filter** with a Photoshop-style histogram; **RGB curves**, **fast colour corrector** and one of our favourites **shadow/highlight** which can make a good shot out of a badly exposed one by raising the mid tones whilst leaving the colour and highlights and dark areas intact. Premiere also has **secondary colour correction** - where you choose to adjust only a range of colours in the image.
- Photoshop-style **blending modes** on all clips.
- **Blur** and **sharpness** effects.
- **Distortion effects** - lens distortion, corner pinning, spherize and more.
- **Timecode** - can write the timecode of the original media on the clip.
- **Keying filters** - blue screen, chromakey, image matte, track matte, together with up to a 16 point keyframable garbage matte - so you can limit the area being superimposed and even make the area move across screen. The best keyer is ULTRA key which does much better keying than in previous versions of Premiere. Better keying is available in After Effects, using **Keylight**.
- **Noise** - filters for adding or removing noise.
- Lens flares, animatable gradients, cell or checkerboard patterns.
- **Brush strokes** - simulate a "painting style" on your image, **write on** - draw a path which gets revealed on screen over time, "**texturize**" a layer.

MERCURY PLAYBACK ENGINE

With CC Adobe introduced a new "playback engine" for Adobe Premiere Pro. Match this with the right kind of graphics cards and you get realtime playback of multiple layers of effects, even with highly compressed HD footage.

The **Mercury Playback Engine (MPE)** uses the CUDA chips found on NVIDIA graphics cards to do the effects work, leaving the CPU to playback and encode footage. Not all effects are accelerated by MPE, but many are. These include:



Extract, levels, proc amp, Gaussian blur, sharpen, 14 effects for colour correction and image manipulation, garbage mattes, track matte, the new Ultra keyer, noise, basic 3D, crop, edge feather, flip, timecode and cross

dissolves. Also the standard 2D motion is accelerated.

MPE does not speed up encoding video to different formats (such as DVD and Blu-ray). If you put a clip on a timeline with no effects and make a DVD it would take the same amount of time regardless of whether you have an MPE graphics cards or not. If you add effects, colour correction, downsize from HD to SD, then it will make a difference because the computer will not have to work at encoding *and* doing the effects. The effects happen in realtime on the graphics cards and the computer uses 100% power encoding the footage so it can happen a lot faster.



- **Leave colour** - leave one colour on screen whilst making the rest black and white.
- **Echo** and **posterize** time.
- Although there are a lot of transitions in Premiere Pro most of them are rather poor. Adobe added a nice "film dissolve" to complement the regular fade, but the rest of the transitions have hardly changed since Premiere 1 in 1995. Premiere does not have a selection of wacky 3D transitions like **Grass Valley EDIUS**. You may never need wacky 3D effect but if you do then you will have to buy some if you use Premiere.

All are controlled via the "effects control window". With this window all the parameters to change the effects are instantly available - you don't have to open new dialogue boxes. This is based on the After Effects timeline and if you transfer your Premiere sequence into After Effects for more comprehensive tweaking, all the adjustments made in Premiere are carried over as well.

ADOBE PREMIERE PRO

CAPTURE

On its own the software will capture using the FireWire port built into your computer. This allows you to capture either DV or HDV footage from most cameras. If using card based media, like AVCHD or XDCam, you just copy the footage onto the machine and load it into the program using the **Adobe Media Browser**. If you buy the Production Premium you also get Adobe Prelude which can copy your footage off the card, verify it and even transcode and make several copies as it does this.

You can add analogue i/o by using an **analogue to digital converter** or by adding a **Matrox, Blackmagic or AJA** card. Our preference is for Matrox, although Blackmagic cards are cheaper, and like AJA, some Blackmagic cards can playback higher-than-HD resolutions (such as 1080 50P).

EDITING

Adobe Premiere Pro has an excellent editing interface - pretty intuitive and with lots of useful features built-in. It has great feedback for the different trimming modes showing you up to 4 different frames of video when needed. The major effort when making CC was aimed at streamlining editing and trimming.

COMMON INTERFACE

All the Adobe programs share the same kind of interface, windows dock and undock in the same way, so if you are using other Adobe programs you will feel at home.

HIGHER COLOUR DEPTH

Premiere renders at higher quality with 10-bit and 16-bit colour resolution support and 32-bit internal colour processing. Using hardware from Blackmagic or Matrox you can capture and edit 10 bit footage as well.

BETTER QUALITY SCALING

You can render at high quality at the touch of a button. Better quality means longer encoding times unless you have a MERCURY PLAYBACK graphics cards - in which case it is realtime.

METADATA

With card based cameras you don't just record the

picture you can record lots of other information. There are even devices that you can update via wireless with extra info when filming - marking good shots and adding comments. Premiere Pro see all this extra information, called Metadata, in the project window, and you can easily search through it. You can also get Premiere to convert what is said into text, or add



a reference script and Premiere will match the script to your clips. Then you can search for a word in the script and Premiere will find it in the video.

MULTI-CAMERA EDITING

Premiere's Multi-camera feature is very easy to use - once the clips are synced enable Multi-camera, and watch them in the **Multi-camera monitor** where you see all your source cameras in one screen and the chosen playback camera in another. Click on the clip or use the numbers on your keyboard to switch between shots. With CC the number of cameras you can use is only limited by your computer power, and Adobe have added several quick ways of making multi-camera sequences.

ADOBE MEDIA ENCODER

Adobe Media Encoder (AME) converts one type of file into another. You can load **multiple Premiere timelines, After Effects projects** or just individual clips, choose your outputs and start encoding. There are loads of output options which includes some of the **best Flash output** options built-in, MPEG2, H.264 and many, many more. 64 bit AME will make the maximum use of your processing power and RAM. You can even encoding in the background while you carry on editing.

64 BIT APPLICATION

ADOBE PREMIERE PRO IS A 64 BIT APPLICATION

For years we have been using 32 bit applications, but these have some limitations - they can only use 2GB RAM in your system, even if you have 12GB or more installed, and they do not use processors with multiple cores as well as they could. A 64 bit application will make the best use of both, which means it is more stable, more reliable, even with highly compressed HD footage, *and* faster at making effects and encoding.

ARE THERE ANY DOWNSIDES?

1. You must have a 64 bit operating system, either Windows 7, Windows 8 or Windows 10.
2. You can only use **64 bit plug-ins**. Plug-ins from CS4 or before, and many VST audio plug-ins will not load into 64 bit Premiere Pro and you will need to update them

WHAT ARE THE ADVANTAGES?

Speed and reliability -the two of the most important features of an editing program.



ADOBE ENCORE CS6

Adobe Encore is our favourite DVD authoring program - it can do nearly everything you want in a DVD, can author Blu-ray discs and export to Flash to create interactive web presentations. It is the only program, at a reasonable price, to offer multiple Blu-ray pop up menus on discs.

ADOBE INTEGRATION

Take a timeline, or several timelines, from Premiere Pro and bring them into Encore, without rendering. Any changes you make in Premiere, including changing Encore chapter markers on the Premiere timeline are updated in Encore.

Choose "edit in **Photoshop**" and you can customise your menu to your heart's content. If you want a video menu then use the **dynamic link** with After Effects to create a fancy animated background. Any changes you make in Photoshop or After Effects are seen immediately in Encore.

FEATURES OF ENCORE

Encore lets you make DVDs and Blu-ray discs with **32 subtitles**, **8 audio tracks**, **complex navigation**, **slide shows**, in fact nearly everything you want to do on a DVD. **Sony DVD Architect** does a little bit more - it supports scripting and different video angles - but Encore covers the things most people want. Encore can make **pop-up menus** for Blu-ray discs where-as Architect cannot.

Encore has the same kind of dockable interface that all the Adobe programs share and Adobe have tried to synchronise the keyboard short cuts as much as possible.

EXCELLENT ENCODING

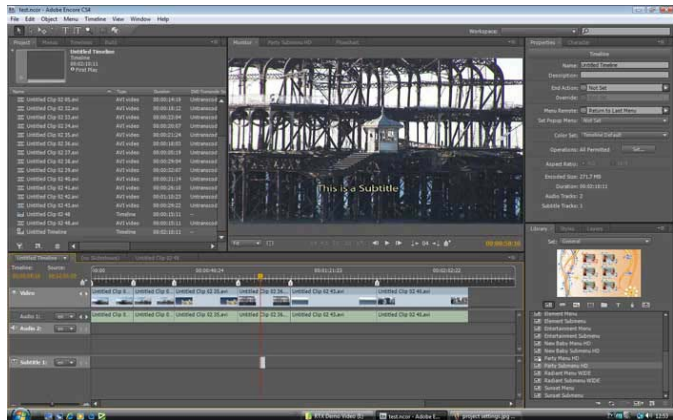
The encoder is Encore does a very good job. You can specify settings or leave it on automatic. The auto option will maximise the quality of the picture for the space available.

SLIDESHOW EDITOR -

Encore's Slideshow editor is lovely - just drag in all the pictures you want to use as a Slideshow, add transitions between the shots and a nice pan. The pan can be customised per slide or you can just tick the random pan and zoom so each slide is subtly different. Bring in some backing music as well and one tick makes the slideshow match the duration of the music.

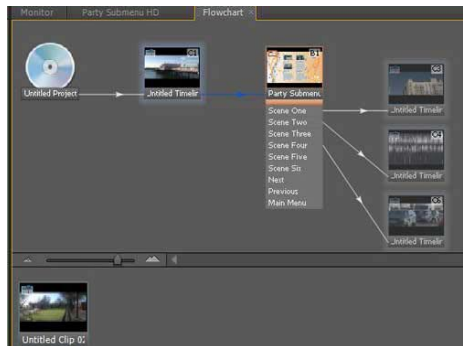
CHAPTER PLAYLISTS

Playlists are available in most DVD authoring programs, where you make a list of several clips and



The mains screen of Encore - in the centre we have the main preview and layout window. You can zoom in and out of this for fine adjustments. The properties palettes are also arranged around this window.

the order they should play, but most playlists will play from a specific chapter. Select chapter 2 it would play from chapter 2 to the very end of the clip - it would not just play from chapter 2 to chapter 3. With Encore's chapter playlists you can choose to just play one chapter from a title - then jump to another chapter in the same title, or, another chapter in another title. How seamless this is will depend on your DVD player.



FLOWCHART VIEW

Encore has a great flowchart view which makes laying out your DVD quick and easy. Just drag from one clip or menu button to another to lay out your disc. This is a brilliant way to layout a disc, from simple to mega complex DVDs.

MORE ROYALTY FREE MENUS AND MEDIA

There is no better way of making a really nice looking menu than stealing someone else's. Encore has lots of video and still backgrounds to choose from - our tutorial DVDs are all authored in Encore and the

ADOBE ENCORE CS6

menus started life as Encore stock footage!

BLU-RAY WRITING

Encore supports Blu-ray writing in all the various sizes in both MPEG (for speed) or H.264 (for more video on a disc). It also writes dual layer Blu-ray discs.

BLU-RAY POP-UP MENUS

Blu-ray discs have extra features not found on DVDs - one of these is pop-up menus which appear over the video when playing. Encore is the first program to be able to add multiple pop-up menus - so you can make Blu-ray discs just like the commercially available ones

NO TRANSCODING OF AVCHD

If you film on AVCHD and you just want to make a Blu-ray disc without editing, load the footage into Encore and add some menus. Encore CC will not remake AVCHD as it is in the correct format for a Blu-ray disc already.

EXPORT TO FLASH

Encore can take an entire DVD and export it to Flash. So without any real knowledge of Flash or web formats you can produce an interactive video using Encore. It does everything including making a web page with all the required links.

With Encore CC you can completely customise your video size and compression. Our own tutorial discs are all created in **720P HD Flash** using Adobe Encore and no knowledge of Flash Pro.

WHAT'S GOOD

- **Dynamic link with Premiere** - imagine you make a DVD and then realise you made an error in the edit. With most programs you would redo the edit, then re-export the video, reorganise the chapters and then finally produce the new disc. With Encore and Premiere, re-edit in Premiere and Encore will be updated straight away.
- **You can configure nearly everything** - chose which button is selected when you reach a menu or which audio track or subtitle is chosen
- **The link with Photoshop** is practically essential for custom made menus. All good programs have a way of making menus from Photoshop files - unsurprisingly Encore is the best!
- **2 pass variable bit rate MPEG encoder** from Main Concept guarantees excellent MPEG quality.
- Encodes audio into **uncompressed, MPEG** or **Dolby Digital**. Will accept 5.1 surround sound AC-3 but cannot make it.

WHAT'S BAD

- Cost - You can only rent it in a bundle with **Adobe Premiere**.
- Adobe have said they will not be developing Encore any further. What it does now is all it will ever do and if a new operating system arrives on which it will not work, they will not fix it.

ADOBE PRELUDE

With most footage filmed on card-based camera Adobe invented a program to deal with this new workflow.

INGESTING FOOTAGE

Prelude will show you the footage on the card/hard drive, and then copy (or "ingest") the footage to a location you specify. You can specify several locations and choose to transcode the footage as you do so. Prelude has various levels of error checking built in to make sure footage is copied successfully.

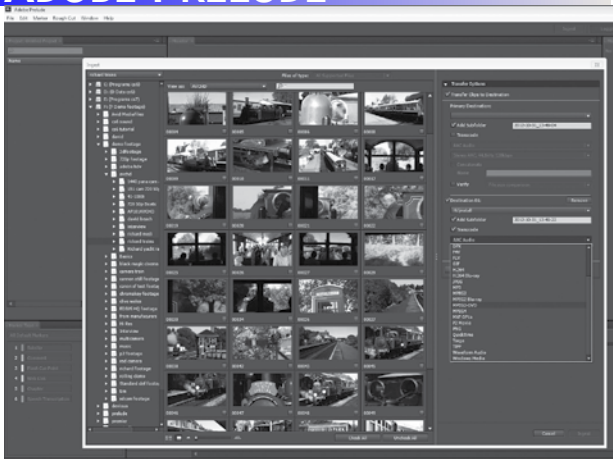
You do not have to copy all the footage - just choose the shots you need and copy these.

MARKING CLIPS

You may just use Prelude to ingest footage, but it does a lot more. You can add various markers to the clips which then stay with the footage when you get into Premiere. Take a long shot and split it into subclips and then send these to Premiere.

ROUGH EDIT

You can make a rough edit from your clips and then send this to Premiere Pro. Prelude also exports XML files which means you could load the clips into other programs like Final Cut Pro.



ADOBE AUDITION



Audition is Adobe's comprehensive audio editing application. It started life as **Cool Edit Pro**, with a name change when Adobe bought the program. Audition was removed from the **CS3 Production Studio**, replaced by a simpler program, Adobe Soundbooth. However with CC the more comprehensive Audition is back, and Soundbooth has been discontinued.

Audition can either tweak individual sounds or be used for multi-track mixing.

DYNAMIC LINK WITH ADOBE PREMIERE PRO CC

Now we have two ways to send audio from Premiere Pro to Audition:

SEND ONE AUDIO CLIP TO AUDITION

Just click on the clip and choose "edit in Audition". Premiere makes a copy of the sound file, and opens this in Audition.

You carry out the work, such

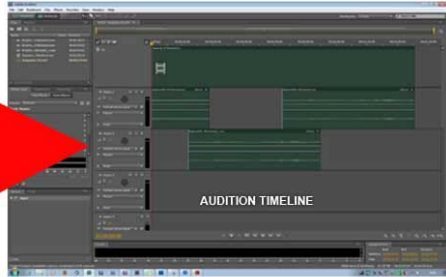
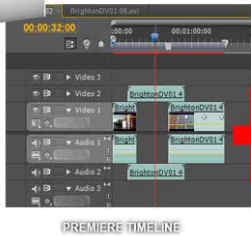
as using Audition excellent noise reduction tools to remove an unwanted sound, and save the results. Back in Premiere your timeline is instantly updated with the changed file.

SEND THE WHOLE TIMELINE TO AUDITION

Premiere has some nice sound tools but Audition is better so why not use Audition for the entire audio mix? Now you can!

In Premiere select the timeline and choose to send the sequence to Audition. Premiere Pro will make copies of all the sound involved and, if you want to see the picture in Audition, a "mixdown" of the picture edit too. This opens in Audition with all the audio clips intact and in the correct place on the Audition timeline.

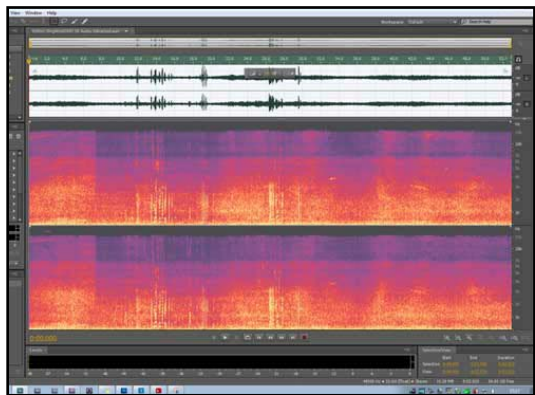
Inside Audition you add clips, tweak the sound and edit as much as you want. Then send the mix back to Adobe Premiere Pro. This will take all the audio clips in Audition and mix them down into one new audio file, or a file for each audio track, and place it in Premiere Pro underneath the existing Premiere sound.



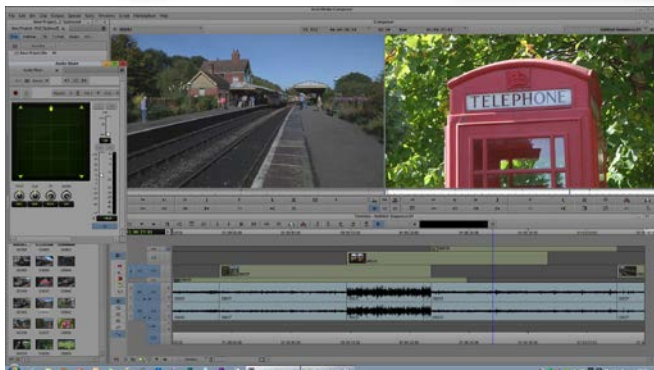
SPECTRAL DISPLAY

Audition can display sound in a traditional waveform or in as a SPECTRAL DISPLAY. This shows the sound as a series of frequencies with the high frequencies at the top and the low frequencies at the bottom. Dark sections are quiet, light sections are noisy. This lets you see which frequencies are actually used in the sound and then you can lasso some and reduce or remove them.

A good example would be a shot with a seagull squawking in the background. The high pitch noise of the seagull appears as bright orange blobs in the display so you can select and delete them.



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Avid Media Composer was one of the first editing programs and still the software used to edit the majority of the world's feature films and TV shows. .

The main interface of Media Composer may look a lot like other editing programs and with good reason. Most of the other editing programs stole their ideas off Avid in the first place. Here you see a source and destination window, the timeline with waveforms displayed, the effects

control window, which is the same for all effects, and Avid's project and bin window.

Avid is often called unintuitive which is partly true - there is just so much inside the program and so many different ways of doing things it can become confusing to a new user.

WHY SHOULD YOU USE MEDIA COMPOSER?

LARGE COMPLEX PROJECTS

Media Composer is the best program for handling large feature film size projects.

THE AMOUNT OF EFFECTS BUILT-IN

It has decent keying, very nice slow motion, painting on video, retouching video and lots more all built-in.

MEDIA MANAGEMENT

Avid has the best media management around - all controlled from within Avid. You can have footage at different quality settings - low res off line or full high res and switch between them. You can check through all the media including render files, see if they are being used and remove them where needed. No one yet rivals Avid for this degree of control.

ON-LINE AND COLLABORATION

Avid is the best program for sharing projects with

other users, or confirming the final edit on an Avid systems.

YOU LIKE MEDIA COMPOSER

An experienced Avid editor knows how to make it fly. He would probably be frustrated with the more "touchy feely", but more intuitive programs like Grass Valley EDIUS or Adobe Premiere.

MAC AND PC

Media Composer works on the Mac and PC. It has its own media format which also works on both.

CUSTOMISABILITY

You can customise the look, the fonts, the audio scrubbing, practically everything. If you can't do what you want using the main interface you can probably do it by using the entering a command in the DOS-like console.

FORMAT SUPPORT WITH MC SOFT

Avid has traditionally not been very good at supporting different formats - not as bad as Final Cut Pro, but not as good as Premiere or EDIUS.

Media Composer has improved considerably over older versions and Avid will open practically ANY MOV file, AVCHD, XDCAM, DVC Pro HD and much more.

Most will edit natively, although if your machine is struggling you may want to convert to Avid's own DNxHD format. For example, even on our best machines Avid's performance with native AVCHD is pretty bad and we would recommend transcoding this footage to make editing a lot nicer

EDITING HD FOOTAGE

When you start a project in Avid you choose a preset which defines the editing mode. However, once in Avid this can be varied between standard definition, HDV and full High Definition. Which mode you are in will then determine at what quality your effects are rendered, with which codec, and where you will see the picture.

LOTS OF CODECS

Media Composer has lots of different codecs, from a low res 15:1s where you can store an hour of video in about 2GB space, to uncompressed SD and HD.

The point of all these codecs is to let you make different versions of the project to use on different machines. Want to do your edit on a laptop but you don't have enough space for your full quality clips? Then transcode them using Avid to an offline resolution, edit on the laptop and then copy the project back to the desktop where it will automatically link to the full quality clips.

64 BIT

MC is now a 64 bit program which means it can access more memory and use modern processors better. This means you can no longer run MC on older operating systems, like Windows XP.

SURROUND SOUND

You can mix surround sound, either 5.1 or 7.1 surround. You can output as a MOV with 6 channels or a 6 channel WAV, but cannot output to a Dolby 5.1 surround sound file without buying extra software (rather like with Adobe Premiere). Media Composer also supports more audio channels than previous versions.



STEREOSCOPIC

Avid has very comprehensive STEREOSCOPIC editing built-in. It supports many 3D formats although currently not the kind of MVC 3D files are created by the Sony TD10. You can output the 3D edit in various formats, but you cannot burn a proper 3D Blu-ray with AVID DVD. The support and control is similar to Sony Vegas and EDIUS 6.5 and very well implemented.

NO BORIS CONTINUUM OR SONICFIRE PRO

MC8 does not ship with and of the old programs that used to be bundled: Avid FX, AVID DVD, Boris Continuum or Sorenson Squeeze. If you have these plug-ins already and they were from MC6 or later (a 64 bit version) you may still be able to use them in MC8, although you may need to buy an upgraded version..

DVD WRITING & BLU-RAY WITH MC SOFT



Media Composer no longer comes with a DVD or Blu-ray writing program. It used to ship with Avid DVD, but this is no longer available. If you already own Avid DVD you may still be able to use it.

A good option is to buy **Sony DVD Architect** which is a very comprehensive authoring program and works with **Avid QuickTime reference files**.

AVID MEDIA COMPOSER 8 AND SUBSCRIPTION

New Avid subscription service/Avid Media Composer 8

Avid Media Composer 8 can be bought as either a permanent licence or as a subscription. There has been a reasonable amount of confusion over the different options so we aim to clarify this here. You can always email us @sales@dvc.uk.com for more information or ring 01273 205700 .

Unlike Adobe Avid are still letting you buy a "permanent" licence of the software - where you pay for the whole thing up front and it carries on working for ever (or as long as you have a computer that can run it). If you want to keep up to date then you pay Avid an upgrade fee at the end of the year, although if you don't have to, and if you don't the software keeps working. Full details of both packages are available below.

SUBSCRIPTION:

You pay a fee per month and if you stop paying the fee the software no longer works. All upgrades to the software that are released during the subscription are included in the price. You can rent for one month or commit for a year. You have slightly more software included with the subscription option than with the permanent licence. The software licence includes:

Avid Media Composer with Symphony option (superior colour correction to regular Media Composer), NewBlue Titler Pro v2, Sorenson Squeeze Lite & Boris Continuum Complete Lite. This also includes some calls to Avid support.

We do not current have information on what is in these "lite" versions of the software.

The subscription costs:

- £35.75 per month if you commit to a year (\$39.99 if you already own MC 6.5 and above) = £429+VAT per year.
- If you own Media Composer 6.5 or 7 you can get a reduced subscription for the first year of £349+VAT. In the second year this raises to the normal subscription price.
- \$74.99 for 1 month subscription. We do not yet have a UK price for the 1 month subscription currently and this may possibly only be available from the Avid website, with the year subscription available from us at DVC.

UPGRADING AN OLD VERSION OF MEDIA COMPOSER TO THE NEW MC8 PERMANENT LICENCE

From the start of 2015 you can only upgrade to the latest version from a version that you have bought in the last 12 months. Until the end of 2014 Avid were letting people update from ANY version but from the start of 2015 this has finished. If you have an earlier version and want to update you have to buy a new permanent licence or subscription. You cannot use your old dongle either on a new version. You must either switch to software activation or buy a new dongle.

With the permanent licence you get the Avid Media Composer program.

With the subscription you get the **Symphony colour correction option** and **Sorenson Squeeze Lite** as well.

PERMANENT LICENCE:

This includes: Avid Media Composer and NewBlue Titler Pro v2. Avid support for 1 year. Subscribers get V2.5 of Titler Pro plus Boris Continuum Lite (about 5 filters from the full BCC package) and the Symphony grading options for Media Composer. These are available as add-ons for Media Composer perpetual licence.

PRICES:

Media Composer perpetual licence: **£939+VAT**

Symphony option with Boris Continuum Lite : **£539+VAT**

1 year Avid support contract : gives you all software updates to a permanent licence for 1 year (see more info below) : **£190+VAT**

Newscutter option : **£359+VAT**

Avid Production Pack (NewBlue Titler Pro 2, Sorenson Squeeze & IZotope Insight): **£429+VAT**

Dongle option (use a USB dongle to activate the licence rather than activating over the internet): **£360+VAT**

The price of £939 also includes all software updates, major or minor, for the first year. In the second year you will have the option of buying a support/upgrade package for Media Composer for £190+VAT. This will entitle you to all software updates for the second year and Avid support. In year 3 you can pay another £190+VAT to keep receiving updates. If you miss out a year- for example you pay for upgrades in year 2, but do not pay for anything in year 3, then when year 4 starts you cannot upgrade the software any more, but have to buy a completely new version for £939+VAT. .

COMPARING THE COST

The main decision about whether to choose a subscription or permanent licence is probably how much does it cost. The following table compares the cost of 5 years:

Avid Media Composer permanent licence :

Year 1: £939+VAT, Year 2: £1,158, Year 3: £1,377, Year 4: £1,596, Year 5: £1,815

Avid Media Composer Permanent licence with similar add on software as subscription:

Year 1: £1,478+VAT , Year 2: £1,697, Year 3: £1,916, Year 4: £2,135, Year 5: £2,354

Avid Media Composer subscription:

Year 1 £429, Year 2 £858, Year 3 £1,287, Year 4 £1,716, Year 5 £2,145

All prices are ex-VAT. The figures are cumulative so the amount for 5 years is how much in total you will have paid in those 5 years. What they are proving is that if you keep your permanent licence up to date the cost is pretty much the same as paying for Avid with a yearly subscription.



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Blackmagicdesign



Blackmagic produce a range of different devices:

CAPTURE CARDS

Add different inputs and outputs to your PC. These work with practically all editing programs including: **Adobe Premiere Pro, Avid Media Composer, Grass Valley EDIUS 7** or later, **Apple Final Cut Pro 7 and X**, and **Sony Vegas**. They are the **ONLY** cards to support **Blackmagic Davinci Resolve**. Blackmagic cards are the cheapest way of adding **proper HD output** to your editing program.

The range of Blackmagic devices also includes:

- Converters and switch boxes
 - Live switching devices
 - Hard drive based recording devices
 - Video cameras
- Blackmagic's range of cameras record in various formats on to a solid state drives or compact flash cards and film in a "RAW" format and gives a brilliant **dynamic range**.

PCIE CARDS



INTENSITY PRO 4K
HDMI and component in and out. Sound via phono/HDMI. Top resolution UHD 25/30P

£129 +VAT £155 inc.



DECKLINK SDI
HD and SD SDI in and out at a low price..

£189 +VAT £227 inc



DECKLINK STUDIO
Everything in, everything out - the DeckLink Studio includes SD/HD-SDI, HDMI, component, composite, S-Video, 4ch balanced analog audio, 2 ch AES/EBU, blackburst and tri-sync reference input and RS-422 deck control connections

£379 +VAT £455 inc



DECKLINK 4K EXTREME
Like the DeckLink Studio but with 3GB SDI support and dual-link 4:4:4 for ultimate quality. It can output at up to UHD 50/60P. Also outputs in full Stereoscopic 3D with the right editing program.

£629 +VAT £764 inc

SOFTWARE SUPPORT

ADOBE PREMIERE PRO CC

Blackmagic cards add all the ins and outs you need to Adobe Premiere Pro, and with the higher end DeckLink 3D Extreme you can even output UHD at 50P.

Blackmagic devices are cheaper than Matrox or AJA equivalents and there are USB3 devices which will work on some of the latest generation of laptops.

SONY VEGAS 13

Blackmagic officially only support Sony Vegas 9, Sony support Blackmagic with version 10, 11 & 12.

APPLE FINAL CUT PRO

Blackmagic support FCP7, and FCPX.

GRASS VALLEY EDIUS

You can capture and playback video using Blackmagic devices and EDIUS and have been able to do so since EDIUS 7 was released.. Blackmagic is the cheapest way to add video inputs to EDIUS.

AVID MEDIA COMPOSER

Blackmagic cards let you capture and playback footage. Capturing is using Avid's normal dialogue and into the usual range of Avid formats including DNxHD. Playback can be either in 2D or in side-by-side 3D. . Please note the USB3 Blackmagic devices are not recommended for Avid.

BLACKMAGIC DAVINCI RESOLVE

Unsurprisingly you can **ONLY** output from DaVinci Resolve using Blackmagic's own cards.

OTHER PROGRAMS

Blackmagic is also supported in many other programs, such as Teletream Wirecast, and has output plug-ins for Adobe After Effects, Fusion and many other applications.

BLACK MAGIC CARDS

USB3 DEVICES

Blackmagic are the first to make devices that use the new USB3 interface. These only work on PCs at the moment and only on *some* modern desktop & laptop computers. They are very particular about the USB chipset and if you do not have the right one they will not work. You can always add the right kind of PCIe USB3 card to a desktop but if your laptop has the wrong chipset there is no way to make it work. The USB3 devices work with **Adobe Premiere Pro** and **Sony Vegas**, but **DO NOT** work with **Avid Media Composer** or **Grass Valley EDIUS**.



INTENSITY SHUTTLE

A USB3 version of the Intensity Pro, HDMI, composite, component and SVIDEO in and out **£129 +VAT £155 inc.**

ULTRA STUDIO SDI

SDI and HDMI in and out. One of the cheapest SDI interfaces and the cheapest way to add SDI capture to a program like EDIUS by far. **£249 +VAT, £298 inc.**

ULTRA STUDIO PRO (PICTURED)

Everything in/everything out in a very cool box. Similar to the Intensity Shuttle but with HD-SDI in and out as well. **£560 +VAT, £672 inc.**

THUNDERBOLT DEVICES



WHAT'S A THUNDERBOLT INTERFACE?

THUNDERBOLT is a new fast interface for external devices, developed by Apple and Intel. Mac computers were the first to have Thunderbolt connections although some PCs are now arriving with Thunderbolt as well. NB: Thunderbolt devices do not come with Thunderbolt cables, which cost approximately £40 extra.

INTENSITY SHUTTLE

A THUNDERBOLT version of the Intensity Shuttle

£159 +VAT £190 inc.



ULTRASTUDIO EXPRESS

This box has SDI and HDMI in and out, and can handle SD, HD and even 2K footage. It can even output two streams through SDI for full quality STEREOSCOPIC footage. **£319 +VAT, £382 inc.**

ULTRASTUDIO 4K



Up to 4K resolution input and output, connected to the computer via Thunderbolt with every connection you could need. **£629+VAT £754 inc**

ULTRASTUDIO EXTREME



Thunderbolt connected box which has every connection you would need plus full 4K 50/60P output and HDMI 2.0.

- Can encode to ProRes in hardware on a MAC
- Includes H.265 encoding hardware on MAC and PC.

This device is also available in a slightly different version for Avid. The Avid version is called the Avid Artist DNxIO. This box is very similar to the Blackmagic device but instead of encoding to Pro Res encodes to Avid DNxHD codec.

£1,999+VAT

£2,399 inc



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AJA

VIDEO SYSTEMS

AJA do a range of capture cards that work with both PC and MAC. The cards are the same, you just use the appropriate drivers for your computer and software.

AJA cards work with a similar range of cards to Blackmagic i.e:

- * **Adobe Premiere Pro.**
- * **Sony Vegas.**
- * **Apple Final Cut Pro.**
- * **Avid Media Composer.**

Mainly AJA cards capture into uncompressed video, or some variation of still images. Inside Avid you have the option of using Avid's own DNxHD codecs which will work on regular drives but normally you need a fast RAID array to be able to capture with AJA.

AJA VS BLACKMAGIC

Performance in Premiere and Avid is similar to Blackmagic. The AJA cards main selling point is quality. Blackmagic cards are cheap and do the job required but tend to have "issues" and bugs which need fixing. AJA cards are made from better quality components and generally considered to be more reliable.



I/O EXPRESS

HDMI & SDI in, HDMI, SDI, composite and component out. Works on laptop via Express card, or desktop. Will capture and playback in Avid Media Composer 5.5

£675+vat

£810 inc



KONA LHE

SDI in, composite SVIDEO and component in and out (no HDMI). Max resolution 1808 50i.

£899+vat

£1,079 inc



KONA LHI

HDMI, SDI in, composite SVIDEO and component in and out. 1080 50P support

£999+vat

£1,198 inc

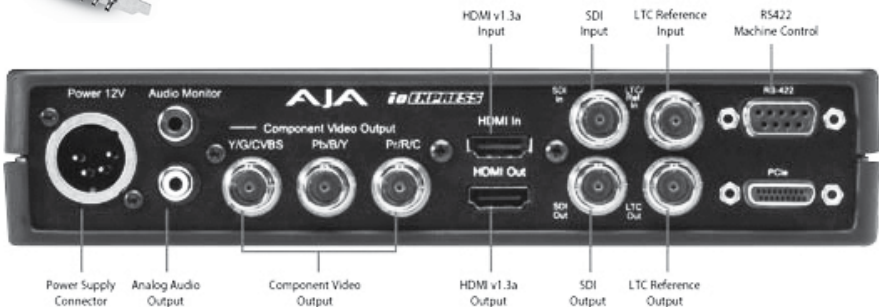


KONA 3G

HDMI & SDI in, HDMI, SDI, composite and component out. Max output resolution 2048 x1556 PsF. HDMI 1.4a support for 3D video

£1,399+vat

£1,678 inc



BLACK MAGIC DAVINCI RESOLVE

WHAT IS BLACKMAGIC DESIGN DAVINCI RESOLVE?

Resolve used to be a very expensive grading program. It gained a lot of popularity for grading feature films long before it was owned by Blackmagic Design in 2009. When Blackmagic took over they drastically changed the pricing and made a completely free version. The free version, now simply known as DaVinci Resolve, is fully functional, does not "time out" or add any watermark. You could use it and produce a whole feature film using it if you so wished.

DaVinci Resolve Studio is the version of Resolve that you can pay for. If you buy Resolve Studio you will get more features, including very nice noise reduction, and support for greater than UHD size projects as well as Stereoscopic project support. Resolve Studio requires a USB Dongle to work. You can edit and grade in Resolve Studio and then open the project in the free version of Resolve (as long as the project is under UHD size, the maximum the free version of Resolve supports) and vice versa.

You also get Resolve Studio, complete with Dongle, free with some of the Blackmagic cameras.

FREE UPDATES

All updates to Resolve are free. Obviously if you have the free version you just install a new free version. However, if you pay for Resolve Studio you get free updates for that as well. Our first Resolve version, with a dongle, was version 9. All updates from version 9 to version 12 were free, unlike all other editing programs.

WHAT IS GRADING?

Grading means enhancing your image in various ways - adjusting the colour or brightness of the whole image or just one area. We used to refer to this simply as colour correction but there is a lot more you can do than merely change the colour, hence the term grading was coined.

You can grade in an editing application, and effect applications (like After Effects) or a program specifically designed for the job - like DaVinci Resolve or Adobe Speedgrade.

RESOLVE FOR EDITING

With the release of Resolve 12 you could simply use Resolve for editing and grading your productions. - see the next page for our impressions of Resolve for editing. .

DAVINCI NEEDS A GOOD GRAPHICS CARD

DaVinci Resolve uses your graphics card for all its effects work. The amount of RAM on the card is also important. If you do not have enough RAM then Resolve may not even load the footage and will certainly be fairly horrible to work with. 2GB RAM is enough for HD. For UHD ideally you want 4GB RAM on the graphics card, or more. This is in addition to the RAM inside your computer. Thankfully a good enough graphics card is not too expensive these days.

Resolve can also use two graphics cards or even 3. To get the most out of multiple graphics cards you will need the full version - Resolve Studio - as the free version is limited to how many cards it will use.



DAVINCI FEATURES:

- ◆ Primary and secondary colour correction in a variety of ways
- ◆ Apply correction in regions based on masks you define.
- ◆ Motion track masks to follow your subject through a scene
- ◆ Image stabilisation included.
- ◆ Colour correction based on nodes - you can add as many as you need. Nodes can be one after the other or run in parallel to other nodes. Far more powerful than grading in an editing program.
- ◆ Video noise reduction available in DaVinci full

FORMAT SUPPORT

DaVinci supports various formats although not any AVI formats. It can take various MXF files including XDCAM, and a variety of QuickTime files as well as files from the Avid Media directory. Format support is probably one of the biggest drawbacks for using Resolve as an editing application as many types will need to be converted before use..

EDITING PROGRAM TO DAVINCI

There are various ways to get your video into DaVinci and it is different for every different program. There is a well-established path if using Avid Media Composer but it is less obvious for others. Check our website for tutorials on different workflows.

OUTPUT VIA BLACKMAGIC CARDS

You need to see your picture on a proper screen when grading - DaVinci works with Blackmagic' hardware to do just this. This is one of the reasons for making a free version of Resolve : to get the best out of the program you will need to add Blackmagic hardware. Resolve will only output through Blackmagic hardware.

DAVINCI FREE

The free version is very powerful and may be all you need. It can edit projects up to UHD and is fully functional. If you pay for the full version you also get decent noise reduction and the ability to grade bigger than HD footage and stereoscopic footage.

DVC DAVINCI SYSTEMS

Even though the software can be free you will still need a decent computer on which to run it. At DVC we specialise in building DaVinci systems to give decent realtime performance -click here for more information.

DaVinci Resolve -

DaVinci Resolve Studio

DaVinci Control surface

Free!

£599+vat

£19,575+vat

RESOLVE COMPARED TO OTHER EDITING PROGRAMS

Resolve 12 enhances the editing side of Resolve making it a very capable editing program. Since there is a free version why not simply start using Resolve instead of the regular program for which you had to pay? Below we give our first impressions of Resolve as an editing program.

VIDEO EDITING

Video editing was working pretty well in Resolve 11 and has improved in Resolve 12. It is thoroughly usable and is packed with many editing features to rival Grass Valley EDIUS or Adobe Premiere Pro. The obvious question is can you stop using either of those programs and use the free version of Resolve instead? Is the editing good enough?

We believe the editing facilities are probably enough for most people but the major drawback, especially for those working on PCs, is the **format support** and the kind of system which is needed.

IMPORTING CLIPS

On their website Blackmagic claim that they support nearly every format. This is true of broadcast formats, but not of domestic formats. Resolve will only load uncompressed AVI and Cineform AVI files. No other formats are supported. It also does not load a lot of different QuickTime formats, although it *does* support the most common ones - ProRes, DNxHD and Grass Valley HQX. It will load MP4 files although performance with these is not as good as with EDIUS or Premiere Pro, and it has trouble with formats like AVCHD. Some of our AVCHD clips it will load the video but not the audio, although most will not load at all, meaning that you will have to convert the footage first to use it in Resolve.

Although Resolve can capture video using a Blackmagic card, there is no support for DV or HDV capture and even the capturing abilities are very limited. Of course, capturing is not the point of the program at all. It is first and foremost a grading program which is why the capturing is fairly poor.

EXPORTING CLIPS

Resolve will export QuickTime files in a few formats, some MXF files and a variety of still images. You cannot make MP4 files or the correct files for a DVD disc or Blu-ray. The easiest way to cure this would be to buy a conversion program like Sorenson Squeeze of TMPEG to make the kinds of files you need to deliver, and just to export a simple format, like a Quicktime file, and then convert that again in the conversion program. It will not make DVD or Blu-ray discs, of course.

GOOD GRAPHICS CARD NEEDED

You will need a graphics cards with at least 1GB RAM, preferably more. Resolve works with either nVidia cards or ATI cards although all our best results have been with nVidia. .

For 4K work we would want a graphics card that has 4GB or more RAM.

The graphics card is important because Resolve

does all of its effects work and some of the playback using the graphics card. If your graphics card is not powerful enough then some parts of the program will not work at all. For example, we have found that the slow motion does not work if you do not have enough graphics card RAM for the project on which you are working. Typically when Resolve cannot get enough power from the graphic card it crashes!

If you need a system which has been custom built for using Resolve we supply them, of course : http://www.dvc.uk.com/acatalog/Black_Magic_Systems.html

WHAT DOES RESOLVE 12 DO?

Having listed the possible problems now we can talk about the good stuff. Resolve 12 is packed with features. The grading is, of course, excellent as this is the same program that is used by major studios for grading productions. The features are frankly amazing for the fact that most people will be using it for free. A quick summary of a few of the editing options:

- ◆ Support for AAF, XML and EDLS which means you should be able to get an edit from your existing program into Resolve reasonably well.
- ◆ The usual array of editing features such as insert and overwrite edits, decent trimming, multiple tracks, slipping, sliding etc in fact pretty much everything you would expect in any editing program. They all work in a pretty standard way, although, like changing from any editing program, you have to learn the Resolve way and the Resolve keyboard shortcuts.
- ◆ Customisable keyboard shortcuts.
- ◆ Multiple timelines and you can nest timelines within timelines (the latter is a new feature of Resolve 12)
- ◆ Good slow motion including "optical flow". This works well in Resolve although we have found the quality of the slow motion with optical flow is better in programs like Avid or After Effects. EDIUS' frame blended slow motion is very good and Grass Valley will be adding "optical flow" to EDIUS 8, although we are not sure quite when..
- ◆ Built-in simple titling.
- ◆ 2D and 3D motion paths with keyframing and bezier keyframes. The ability to title the image in 3D was added in version 12.
- ◆ Support for OFX plug-ins like Boris Continuum and HitFilm. .

CAN I USE RESOLVE 12 ALONG SIDE MY EXISTING EDITING PROGRAM?

As long as you have a system which can run Resolve, the answer is yes. We have Resolve on all our system which also have Premiere, EDIUS and Avid and they do not cause any conflicts. We would also recommend getting a Blackmagic i/o card so you can see the edits properly on a monitor, rather than in the small Resolve playback window.

INSIDE A DVC SYSTEM

At DVC we sift through thousands of components to find the ones that will make the best performing and most reliable systems. We do not use the cheapest components so our computers are not as cheap as a PC from Tesco's, but they are tailored for editing. So what goes into a typical system?

DVC QUIET SYSTEMS

We always try to supply systems that run as quietly as possible. This means choosing the right case and power supply, and changing fans or different components when needed. Currently the fans on some graphics cards create the biggest noise in our systems and are sometimes replaced.

MOTHERBOARD

The motherboard is the main board for the computer, and is very important. We run rigorous tests on many different models before deciding which are the best to use.

PROCESSOR

The processor is the brains of the computer and there are lots of possibilities. At DVC we use the more powerful options. **Moore's Law** states that a computer processor will double in power every 2 years - so if your machine is 4 years old it is only ¼ the power of a modern system. The different processors are:

- **i5 processor**
- a dual core processor which is still considerably faster than older computers. The i5 can cope with both SD and HD editing. This is the lowest cost option we currently offer but does not mean it is under powered!
- **i7 SKYLAKE processor**- Most of our new systems are now based on Skylake processors, and they are very powerful, easily handling hard-to-edit footage like AVCHD. The Skylake processors have a special feature called Intel Quick Sync which basically does very fast encoding of HD footage into H.264 for Blu-ray discs. Presently only Grass Valley EDIUS takes advantage of this, 32GB is the most RAM we can put in a Skylake i7 system currently.
- **i7 2011 pin processor** - The 2011 i7 (also called the Broadwell-E processor) can use more RAM and has more cores than the i7 Skylake, and costs a little more as a result. 64bit editing programs can take advantage of this extra power. For EDIUS we would recommend that you stay with the i7 Skylake because the Intel Quick Sync feature, which EDIUS used for fast H.264 encoding, is only found on Skylake processors. However, if getting a Premiere or Avid system the



extra cost of a 2011 is worth it. A 2011 pin system can have up to 32GB RAM, and 64 bit programs like Premiere Pro will take advantage of the extra memory.

- **Xeon** - a Xeon system has two processors with each processor having either 4 or 6 cores. To get a system which is significantly better than the Skylake i7. Having twice the processing chips does not mean they are twice as fast, however, and paying double the price for a Xeon system over an Skylake does not mean it is twice as good. A dual Xeon will be the fastest system you can get.

Often we are asked which processor is the most future proof. To be honest there are always a new processors being released which will be better than the one you are buying, so don't think about it being future proof, instead buy the most powerful you can afford right now and be content with how fast it is!

RAM

The processor is the brains, the motherboard is the veins and nervous system, and the RAM is where calculations are performed. Generally the more RAM the better, although unless a program is 64bit it will not be able to use it all. All modern editing programs are 64 bit and will use the extra memory.

HARD DRIVES

The hard drives are the long-term memory of the computer - where the programs, video clips etc are stored before they are manipulated by the processor. These days 2TB video drives are standard with 3TB and many sizes up to 8TB drives common. We keep the operating system, Windows, on a different drive to the video.

WHAT IS A SOLID STATE DRIVE?

This is a type of drive which is a lot faster than normal drives. We use them to run Windows because your computer will start faster and work better. We don't use them for video drives simply because they are

quite expensive. One of the ways to reduce the price on our standard system is to use a normal drive instead of a solid state drive (SSD) for Windows.



The system still works perfectly, just not quite as quickly. An SSD can come in many forms - the same physical size as a normal laptop drive (as pictured) or on a circuit board as an **mSATA** or **M.2 drive**.

CASE

You may think that not much thought would go into a simple thing like the case. Not so, we use very specific cases, chosen for their ability to keep the system quiet and their expandability. We are also very specific about power supplies - not choosing the cheapest but choosing ones with a record of reliability.

CARD READERS

All our systems will have card readers built-in which deal with all the main formats of card. We also test them to get the ones which work the fastest. All our card readers are USB3 so can transfer footage off cards as quickly as possible.

GRAPHICS CARD

The graphics card (or GPU) shows you the Windows picture. As they get more and more powerful software companies have been using them to do a lot of effects or encoding work in the computer. So both Premiere and Avid use specific nVidia cards to drive their realtime playback. EDIUS uses the graphics card for their 3D transitions, and add-ons like VisTitle to give you realtime HD animated titles. Vegas has both GPU filters and encoding which is sped up by graphics cards. The right kind of card can seriously improve

performance when editing.

Premiere Pro and DaVinci Resolve use the most GPU power of our editing programs. With Resolve the power of the graphics card is almost more important than the processor. We choose very specific cards for our systems, which, whilst not the cheapest, will make a huge difference to your editing.

FIREWIRE

All our computers have a standard FireWire for HDV and DV capture. We have to test many FireWire connections because quite a few may work for hard drives, but do not work for video!

USB3

All our systems have USB3 connections on the front and back, and we even had to source special adaptors to make the front sockets work. Some of the newest motherboards also have USB3.1 sockets.!

USB2

In addition to the USB3 sockets there will be large number of USB2 sockets on the front and back of our systems.

MONITORS

Our systems normally have 2 full HD computer screens because editing programs are better when spread out, plus a third for the video output.

ANTI-VIRUS

Some Anti-virus programs can affect your editing, although you will want to have an anti-virus program if the computer is on the Internet. Many editing programs force you to go on the Internet these days. We choose the anti-virus program with care after careful testing with various editing programs..

BITFENIX SHINOBI CASE

This is our standard quiet case and has extra sound-deadening padding, large fans, which run slowly so do not create too much noise, and many other noise suppression features.

It is also smaller than previous quiet cases and does not have a door - the door was always slightly irritating when loading DVDs

The case comes with 2xUSB2, and 2xUSB3 on the front (more at the back) 1 headphone and 1 Microphone socket and a card reader built-in.

Dimensions: 206cm (w) x 460mm (h) x 499mm (D)



WINDOWS 10 OR WINDOWS 7

The latest version of most editing programs and hardware will work on both Windows 7 and Windows 10. In fact the guts of both operating systems seem very similar. Which should you choose? We would recommend using Windows 10 as this is the operating system that will be supported for many years to come, provided you are using programs which we know work properly on Windows 10. This includes all modern editing programs and many older versions which, although not validated for Windows 10, still work. Contact us to discuss which programs you are using.



MICROLAB SPEAKERS

We either supply good quality computer speakers or, for the best results, use our MicroLab speakers. Apart from the sound quality they have two inputs - one for the computer and one for your editing card (Matrox MX02, Grass Valley SPARK etc) - making it easy to hear both all the time, and removing the need for loop through cables or separate mixers.

£52+VAT

£62 inc.

SPECIALIST KEYBOARDS

You can edit faster if you learn the keyboard shortcuts for your editing program. The easiest way is to use a keyboard with all the keys highlighted. Different colours relate to different aspects of the editing program.

They also function as normal keyboards and do not need any drivers. The latest generation pictured here are USB keyboards with a USB hub built-in. They are also weighted to be much heavier than a standard keyboard.

Pricing listed do not include the jog shuttle dial shown which is available separately.

There are cheaper colour keyboards available but they are all using the US keyboard layout rather than the UK layout which is incredibly annoying when it comes to use the keyboard for simple things like typing! Our keyboards are all UK layout.



UK layout keyboards		
Adobe Premiere Pro (all versions), Grass Valley EDIUS 5-8, Sony Vegas, Avid Liquid, Apple Final Cut Pro, Adobe After Effects, Avid Media Composer	£79+VAT	£94 inc.
Editor's Keys backlit keyboards - powered by USB these keyboards have a backlight to make them easy to see in dark conditions - available for most major editing programs	£83+VAT	£99 inc
Editor's Keys Wireless keyboards - available for Premiere Pro, Avid Media composer and Photoshop	£58+VAT	£70 inc.
Editor's Keys Wired keyboards - for a large variety of editing programs. Very new and some models not yet available.	£42+VAT	£50 inc.

CONSIDERATIONS FOR LAPTOP EDITING

These days laptops are fast and can have a large amount of storage - our best laptop can have up to 2TB of storage internally.

We even have laptops which have desktop Skylake processors in them so are as powerful as a desktop, plus models with 2 graphics cards or a desktop graphics cards (most laptops have slightly less powerful laptop graphics cards).

This does not mean you can pop into Tesco and buy the latest cheap laptop and edit with no problems. Cheap laptops do not have dedicated graphics cards - which means that they use the computer's RAM to run the graphics card which can cause problems with some editing applications. More and more editing applications use the graphics card for a lot of effects work and a shared memory laptop means incorrectly rendered effects, crashing or programs failing to run. Our laptops have dedicated cards with their own memory just like desktop machines.

Cheap laptops generally have a lot less RAM, and the lower spec processors - we would recommend 4GB as the absolute minimum amount of RAM, and if editing HD then 8GB is needed, 16GB or higher is better (and not too expensive).

CAN I TRANSFER PROJECTS BETWEEN LAPTOP AND DESKTOP?

Yes; any project edited on the laptop can be finished off on a desktop or vice versa. Ideally keep all the media on an external drive, like a Sonnet box and then you just need to plug this box into the system on which you wish to edit. Use an eSATA or USB3 connection if possible as this is the fastest available. USB3 looks like it will become the commonest format for external drives.

CAN I EDIT HDV OR AVCHD?

HDV is fine on our modern laptops. AVCHD playback is variable depending on the program. Our latest i7 laptop using Grass Valley EDIUS can manage nearly 3 layers of video with native AVCHD. Playback in **Adobe Premiere Pro CC** is nearly as good.

WILL OUR LAPTOPS WORK THE ADOBE MERCURY PLAYBACK ENGINE?

Yes, you can accelerate Premiere using ANY nVidia card and since our laptops do have powerful cards we can get decent MPE performance.

I HAVE GOT THE SOFTWARE CAN I JUST BUY THE LAPTOP?

Yes. Send us the software and we will install and test it when we build the laptop.

CAN I ADD A BLU-RAY WRITER?

Yes, Blu-ray writers can be added internally or externally, and they are actually quite cheap now, so



we tend to fit them as standard..

CAN I EDIT HD OR 4K?

All of our i7 laptops can edit 4K footage. With **Grass Valley EDIUS 8** you can get a couple of layers of playback of UHD footage on either the desktop processor laptop or on the normal Haswell laptop. This is because EDIUS 8 can use **Intel Quick Sync** to help playback h.264 based UHD footage which means that even on a regular laptop you can get good 4K playback as long as your footage is H.264 based (such as footage filmed with the Panasonic GH4). UHD/4K footage filmed into other formats like ProRes will work best on the desktop processor laptop.

Avid and Premiere will both want the best processor you can get, so we recommend the desktop processor laptop with these programs. DaVinci Resolve will also need a large amount of RAM on the graphics cards to handle 4K and you must choose a graphics cards which has 4GB or more RAM.

HD is easier than 4K and all the laptops can happily handle HD editing. SD is even easier.

HOW DO I GET FOOTAGE IN AND OUT?

DV or HDV is captured via FireWire, so you will need a FireWire interface. This is only currently available with the HPZbook.

For other footage you can use one of the Blackmagic USB3 devices like the Blackmagic Intensity Shuttle. This works on all of our laptops, however, it generally has problems with Avid Media Composer, although works well with EDIUS, Premiere Pro and Resolve. The performance of the USB3 devices does change as the drivers and software changes so if you are thinking of buying one of these devices check with us for the latest info. There are no 4K USB3 devices.

DVC SKYLAKE DESKTOP PROCESSOR LAPTOP

This laptop uses an Intel Skylake desktop processor - the same kind of processor used in desktop computers. This makes it the most powerful laptop available. We also have a version that uses a desktop graphics cards, instead of a laptop one, and one that has two graphics cards.

What are the special features of this What are the downsides compared to our other laptops?

NO QUICK SYNC

Some of our Other laptops can use Quick Sync for fast encoding to Blu-ray and MP4 files. This is only used by EDIUS and Vegas so is not an issue for Avid or Premiere Pro users.

LOWER BATTERY LIFE

Because the laptop is more powerful it will have a lower battery life than laptops that use laptop processors. Most people believe that more processing power is more important than battery life. Typically this laptop will last about an hour on battery when editing; longer if just used for regular computing, such as email.

NO BLU-RAY OR DVD WRITER

The laptop does not have an optical drive, and you would need to use an external drive for writing DVD and Blu-ray discs which is included in the options below. Our standard Skylake laptop can have an optical drive, whereas our High Spec Skylake laptop cannot.

NO FIREWIRE

Most laptops do not have a FireWire port these days, and this is true of most of our range. Only the HP ZBook can have a FireWire interface, using the Express card socket. This is obviously a problem if you are still filming on DV or HDV, but not otherwise. As this laptop has a Thunderbolt port it is possible we will be able to add a FireWire socket using the Thunderbolt port. However, this laptop has Thunderbolt 3 and as yet no Thunderbolt 3 to FireWire adaptors are available.

WHAT ARE THE ADVANTAGES?

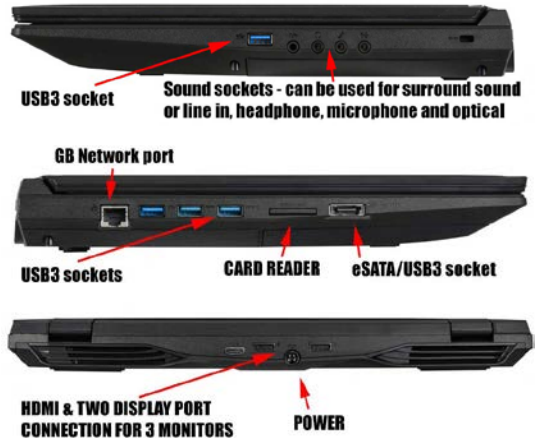
More processing power! If editing complex timelines or 4K footage you need all the power you can get. This is the most powerful laptop we can supply.

TYPICAL SYSTEM:

17.3" screen, 4Ghz i7 processor, 128GB M.2 hard drive for Windows, plus 1TB drive for video, 16GB RAM, nVidia 970 graphics cards.

£1,453+VAT

£1,744 inc.



17" SKYLAKE LAPTOP

17.3" SCREEN, 2.6GHZ I7 PROCESSOR, 128GB HARD DRIVE, 1TB VIDEO DRIVE, 16GB RAM, BLU-RAY WRITER

£915 +VAT

Using EDIUS and Intel Quick Sync technology it can encode an hour EDIUS timeline into a Blu-ray file in 20 minutes! It has access to both the Intel graphics cards capable of doing this AND a decent nVidia 940M or 950M graphics cards for GPU effects.

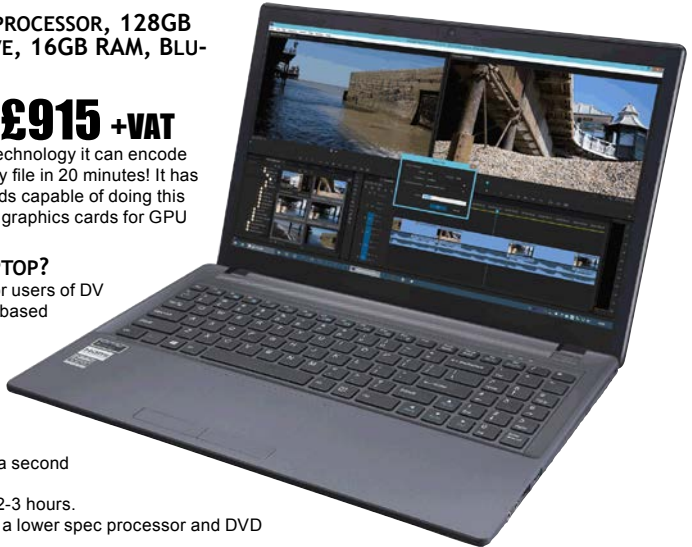
WHAT'S BAD ABOUT THIS LAPTOP?

- No FireWire socket - so no use for users of DV or HDV but fine for users of card-based footage.

WHAT'S GOOD ABOUT THIS LAPTOP?

- Powerful spec for a low price
- Uses Intel Quick Sync for fast Blu-ray encoding
- Optical drive can be replaced by a second drive in a bay.
- Long battery life for normal use -2-3 hours.

The above is a sample system - with a lower spec processor and DVD writer it would be even cheaper!!



HP LAPTOP WITH EXPRESS CARD SOCKET

The HPZBOOK is a powerful laptop, and equipped with an expensive Quadro graphics cards. The extra cost gives you the right kind of card for by **Adobe Premiere Pro** and **Avid Media Composer** and an express card socket for a **FireWire card** or **Grass Valley STORM Mobile**. More RAM and second hard drive can be added on request.

WHAT ARE THE ADVANTAGES OF THE HP LAPTOP

- 1) EXPRESS CARD socket - this allows you to use devices like a FireWire card, **Grass Valley STORM Mobile** and **AJA I/O Express**.
- 2) The HP with a Quadro K3100M graphics cards is the correct validated specification for use with Avid Media Composer and has one of the few laptop graphics cards validated for Avid Media Composer.
- 3) In addition to the DVC warranty the HP has a **3 year return to base HP warranty**. You can also upgrade to an on-site HP warranty.

WHAT ARE THE ADVANTAGES OF THE DVC SKYLAKE LAPTOP?

For the same specification the Skylake laptops are considerably cheaper.

HPZbook - 17.3" screen - Intel Core i7-4710QM Quad Core processor- Windows 7 or Windows 10 - 8 GB RAM - 256GB SSD- nVidia Quadro K3100M Graphics- Blu-ray Rom / DVDRW

£1,809+VAT

£2,171 inc.

15" Model also available:



GET THE MOST OUT OF YOUR EDITING WITH DVC TRAINING

A DVC training course is one of the best ways of learning your new computer. Whilst tutorial videos and manuals are good aids there is nothing like having a person explain how to use the software in plain English and being able to answer your questions when they occur.

We now offer training courses in **Grass Valley EDIUS, Adobe Premiere, Avid Media Composer, Adobe Encore, Adobe After Effects**. Courses are either run in or dedicated training room here at DVC or at your premises.

Training costs **£300 +VAT per day**. Courses normally start at 10AM and finish between 4PM and 5PM with a short break for lunch.

For each course we have a set number of topics to be covered but this can be varied depending on your needs. It is best to prepare for the training with a list of questions and we will discuss them at the start of the day and make sure everything is covered during our session.

We can run any type of course you would like on the software listed, in fact no two training courses tend to be the same as we adapt the basic topics to suit your needs. Our courses have run from a normal one day or even half day course up to a 5 day course for an Octogenarian customer using EDIUS to create DVDs from all the film and video he had taken over his life.

We like to include as much "hands-on" work as possible as the best way to learn anything is to actually do it yourself. We can run courses for people of many different abilities - from an introduction for a complete beginner to an established user who want to make sure they are getting the best from their software or systems. Ideally everyone on a group course would be of similar ability. You will discuss your needs in advance with DVC trainer, David Clarke, to make sure the time on the day is optimised as much as possible.

Training can either be at DVC or at your premises. If at your premises all we will charge are the extra travelling expenses. Expenses would be discussed and agreed in advance.

Courses are normally run on DVC equipment but if we use your own system then any changes or customisation made to the program during the training will be saved on your machine. You can bring your machine to DVC for the training if you prefer.

If you would like to book a course just give us a ring at DVC to arrange a convenient time.

DVC tutorials and training are carried out by DVC MD David Clarke. David has been using Premiere since version 1, as well as Avid Liquid, Media Composer and Grass Valley EDIUS. He is also on the prerelease programs for some of the software.



His main editing is either DVC tutorial videos (generally edited in Premiere or EDIUS and authored in Encore) or the epic 6 part Dr Who story that he has been making, purely for fun, over the last few years.

COURSE DETAILS

INTRODUCTION TO MEDIA COMPOSER - 1 DAY - £300 +VAT, GROUP COURSE £400 +VAT

Media Composer is a program that is so packed with features that we could not cover all of it in a day. Our Avid course covers as much as possible and will get you up and working in MCsoft quickly, being able to handle the way Avid deals with Media and making the most of its great trimming tools.

AN INTRODUCTION TO ADOBE AFTER EFFECTS - 1 DAY - £300 +VAT, GROUP COURSE £400 +VAT

Many customers have After Effects but do not know where to start. We designed this course for this kind of user. If you know some of After Effects and want to get more in depth this is not the course for you - but if you want to learn how to get started, how to access some of the excellent pre-made scenes and templates and customise them for your own needs, how to get footage in from other programs, or just gain enough knowledge to start playing and learning on your own this one day course is for you.

GRASS VALLEY EDIUS COURSES

Our EDIUS courses cover every aspect of the program and include capturing, different editing techniques, titles, using effects and EDIUS' DVD writing. EDIUS has several ways of working and we can work out which suits you the best and show you how to make the most out of the great editing speed of which EDIUS is capable.

EDIUS OVER VIEW - 1 DAY - £300 +VAT, GROUP COURSE £400 +VAT

This course is designed to take you through the basics of editing with EDIUS. We will deal with the following

An overview of the interface, capture, editing - include various ways of trimming, common keyboard short cuts, the importance of understanding insert and overwrite modes, basic titles and effects, export to DVD/Blu-ray.

EDIUS IN-DEPTH - 2 DAY - £600 +VAT, GROUP COURSE £800 +VAT

The two day course will cover the same ground as the one day course but will also include more "hands on" exercises as well as go more in depth into effects, export formats and other areas.

With either course we will customise the sessions to cover topics of particular interest, and not cover topics of no use. Before you sit down to take the course you should prepare a list of questions advance you need to be covered and we will make sure these are covered during the day.

COURSE OUTLINE (FOR A TYPICAL 2 DAY COURSE):

DAY 1

Introduction to the EDIUS interface (brief). This would include an explanation of where files are saved on the computer, where back ups are stored etc.

Capture and import - the formats covered would depend on those being used by the trainee. We would also cover how to deal with different aspect ratios, field order problems and the best ways to get footage off DVD..

Editing & trimming - The editing session would cover EDIUS track patching, insert and overwrite modes and trimming windows. There would do a lot of "hands-on" during this session. If the trainee is familiar with a different editing program we would also point out the ways in which EDIUS is different. We would also cover the most useful keyboard short cuts, L cuts and J cuts etc..

Export - export to tape, DVD and files, obviously focusing on the formats needed by the trainee.

This would complete the first days training and the trainee now should be able to do an edit from start to finish.

DAY 2

Recap on day one and follow up any points raised. If the trainee thinks it would be beneficial then a quick hands-on capture and edit session of about 30 minutes may be included to refresh what was learned.

Video Effects - Colour & image correction, slow motion including EDIUS time-remapping, the mask filter and its uses, the ProDAD image stabiliser and an introduction to Vitascene. EDIUS "alpha channel" track would also be covered and we would explain how to make a picture in picture effect or selectively crop an image.

Audio Mixing and Effects - mixing audio levels, the uses of EDIUS' mixer, EDIUS's tools for cleaning up audio, how to get a 5.1 surround track on a disc using EDIUS.

Titles - making simple titles with Quick Titler and quick ways of inserting these.

Any other business - We would encourage the trainees to ask questions during the day but if there are any "large" topics that need to be covered we would do so now. If for example you need to consolidate projects, move from one machine to another, or export projects to After Effects, for example, these could be covered here.

We could compress this into a single day if needed but there would be less time for hands-on experience which is the best way to learn, and also some of the sections would be severely truncated or dropped.

The two days could run consecutively or spaced apart. For many people having two days a week apart gives them some time to absorb the training from day 1 ready for day 2.

With any course we would discuss your needs before the training day and tailor a course for your requirements.



DVC Managing Director, David Clarke, is a certified EDIUS silver trainer and authorised run the Grass Cutters EDIUS Prime training course (details overleaf)



to

GRASS VALLEY GRASS CUTTERS COURSE

GRASS VALLEY GRASS CUTTERS COURSE - 3 DAYS - £900

Become an EDIUS qualified editor. The **Grass Valley Grass Cutters course** is a 3 day course designed by Grass Valley to teach users everything needed to be able to edit using EDIUS. At the end of the course the trainee will receive a Grass Valley certificate and an entry on the Grass Cutters website. The latter will be accessed by companies looking to employ qualified EDIUS editors. You will also receive the Grass Cutters course book with the entire course laid out with various exercises which you can repeat after training.

The Grass Cutters course structure is fairly well defined and concentrates on editing with lots of hands-on tasks to confirm you fully understand what has been taught.

For more details visit the DVC website or contact David on 01273 205700 or David@dvc.uk.com



ADOBE PREMIERE PRO COURSES

ADOBE PREMIERE PRO -OVERVIEW - 1 DAY - £300 +VAT, GROUP COURSE £400 +VAT

An overview of the interface, capture, editing - include various ways of trimming, common keyboard short cuts, the importance of understanding insert and overwrite modes, basic titles and effects, export to DVD/Blu-ray using Adobe Encore. There is so much in Premiere it is difficult fit it all in a day's course - for example we will only have enough time to spend about 1 hour on Adobe Encore. However, you should finish the course with enough knowledge to know how to edit and finish a project, plus armed with the knowledge of where to go next.

ADOBE PREMIERE PRO - IN-DEPTH - 2 DAY - £600 +VAT, GROUP COURSE £800 +VAT

A two day course will cover all topics with more depth - export to Encore would be expanded to using the whole afternoon on the second day, for example.

ADOBE PREMIERE PRO (TYPICAL 1 DAY COURSE OUTLINE):

MORNING:

Introduction to Premiere and a very brief tour of the interface.

Capture from your camera or how best to import footage if using card based media..

Taking clips and organising on the timeline, and various editing short cuts.

Audio mixing, recording in more dialogue or music.

AFTERNOON

Titles - still image titles and moving.

Effects - mainly colour correction and improving images. There is a lot in Premiere Pro but we would not have time to cover it. If you have a specific need - such as being able to easily blot out peoples faces for privacy reasons then we could make sure this is covered as well.

Stills - how to add them to an edit, overlay and pan around them.

Export to DVD/Blu-ray and other formats. This would include about an hour on the basics of Adobe Encore.

Again topics could be varied to make sure we covered exact subjects that you need to know. A 2 day course would cover the same general outline but there would be more time for the trainee to practice the techniques and we could cover the topics in a lot more detail.

USING ADOBE ENCORE - 1 DAY - £300 +VAT, GROUP COURSE £400 +VAT

We normally include a short introduction to Adobe Encore in our Premiere courses but if you want more then a full day's course will take you through the entire program including customising menus in Photoshop and using the new Blu-ray features.

We always try to run courses on the same kind of hardware and software as you are using yourself - so if you have a Matrox system we will run the course using a Matrox card and concentrating on using the best features of the card in conjunction with the program. We can run courses using Premiere Pro CS5/6 up to the current CC version. Before attending the course you would discuss details with David Clarke on exactly what your needs are and what you hope to achieve.



ADOBE PREMIERE PRO CC TUTORIAL

Total length: **15.45 hours**

We have made a completely new tutorial about editing in the latest version of the Creative Cloud software, which covers making a complete edit in Premiere Pro CC as well as many other topics such as relinking offline of moved clips and the project manager. It also includes a short introduction to making DVDs with menus in Encore.

We have also included some chapters from our previous Premiere Pro CS6 tutorial for items that have not changed between the two versions. *Some* of the chapters are also available for free on our YouTube channel

The tutorial is made using HTML 5 video and will play using your web browser. You do not need to connect your computer to the Internet to view it - everything is installed on your own computer, it just plays in a web browser.

You can order the tutorial by post or download it direct from the website.

A BASIC EDIT - APPROX. 3HRS

We take you through a complete edit using Adobe Premiere Pro CC using AVCHD footage - from taking the footage off the camera up to and including making a DVD.

A TOUR OF PREMIERE PRO - 1 HOUR 4 MINS

A run through the main windows of Adobe Premiere Pro, plus important topics covering where your projects are saved, temporary files are made and saving projects to the Creative Cloud.

EDITING - 3 HOUR 51 MINS

The big changes in CC are all about better editing. This section goes into every aspect of CC editing and is split into 7 sections covering the project window, adding clips to the timeline in various ways, all the ways of trimming with CC, multi-camera editing and a section covering various other options such as relinking missing clips and using the project manager for archiving projects....

EDITING SOUND - 58 MINUTES

How to edit and mix sound in Premiere Pro and

dealing with common problems.

EFFECTS - 4 HOURS 37 MINS

The basic of effects and keyframing in CC, all the ways of grading with CC, titles, transitions, Premiere's speed and time remapping, the warp stabiliser, and ultra key.

All the aspects of sound editing with Adobe Premiere Pro. (This section is available to view for free on the DVC website).

USING BLACKMAGIC DEVICES - 15 MINUTES

A small section covering the important details of using a Blackmagic i/o card with Premiere Pro.

INPUT - 38 MINS

Capture from tape, including batch capture, importing AVCHD and ways of solving problems with imported footage.

OUTPUT - 43 MINS

Export using the Adobe Media Encoder and record to tape.

Full contents and details are available on the DVC website.

Adobe Premiere Pro CC tutorial

£40 +VAT

£39 inc.



USING ADOBE ENCORE CS6

A comprehensive tutorial for using Adobe's powerful DVD authoring application, Adobe Encore. The tutorial covers the entire DVD and Blu-ray authoring process, including import from Premiere Pro, navigation and menu design, integration with Photoshop and encoding for both standard and HD video.

The disc was made with Encore CS6 although would be useful for people with CS5 & CS4 since not too much has changed in the basic operation of Encore over the last few versions. If you have Encore CS3 we do have a separate tutorial available for this.

ORDER FOR DOWNLOAD OR BY POST

Full details of the contents of the disc are available on our website, where you can order and download the tutorial immediately. Since it is made in high definition at 720P you can also order the tutorial by post.



£32+VAT

£39 inc

DVC TRAINING DVDS



This training set covers all aspects of using Grass Valley EDIUS and contains over 17 hours material.

The tutorial covers much of the same ground as our popular EDIUS 7 tutorial and has some new sections which have been made using EDIUS 8.

Our EDIUS 7 tutorial is quite long, because it is very comprehensive and covers just about everything in EDIUS. It is therefore going to take us quite some time to remake the whole thing so that it uses the EDIUS 8 interface. Nearly everything in EDIUS 8 works the same ways as it does in EDIUS 7 so apart from the interface being a bit flatter the chapters made using EDIUS 7 are actually relevant to EDIUS 8. Obviously it would be nicer if all of the sections were remade with the interface looking exactly like EDIUS 8, but we have not completed this work yet. It will take us some time to do this - we estimate 2-3 months.

We decided to remake the introductory edit section, which is where we recommend people start learning EDIUS, which has been completed. The introductory edit section has been expanded so it covers a bit more than the EDIUS 7 version (you can see the EDIUS 7 version on our website - <http://www.dvc.uk.com/acatalog/A-complete-edit-in-EDIUS-7.html>).

We have also added some new sections covering the new parts of EDIUS 8 that were not in EDIUS 7 at all. The major new section covers the GV browser, although we have also added chapters regarding EDIUS Workgroup and Pro and the new project template feature.

The sections on effects, audio, export and import all are done with EDIUS 7. It will take a few months to get them all redone and I will also be doing new videos on the new features coming in EDIUS 8 in the meantime.

If you order this version now you will be able to "upgrade" to the version which is completely remade in EDIUS 8 for about £20, when it is available.

This tutorial is available at a reduced cost to anyone who ordered the original DVC EDIUS tutorial set. You will also get the entire tutorial free if you purchase a DVC system.

BRIEF LIST OF CONTENTS:

- Getting started in EDIUS and a complete edit
- Everything you need to know about editing the picture
- Sound editing and the audio mixer
- Multi-camera editing.
- Effects including the layouter, mask, slow motion, and grading.
- Importing footage, the source browser and the new GV Browser.
- Exporting footage in various formats and using AAFs to export to other programs.
- Burn to disc in depth.
- EDIUS's settings in depth.
- How to - a collection of chapters explaining how to do various common functions.

EDIUS 8 TUTORIAL FOR OWNERS OF DVC'S EDIUS 7 TUTORIAL:

£20 INC. VAT

EDIUS 8 TUTORIAL SENT BY POST OR DOWNLOADABLE FROM THE DVC WEBSITE:

£96 INC. VAT

EDIUS 8 TUTORIAL WHEN BOUGHT WITH EDIUS HALF PRICE:

£48 INC. VAT

EDIUS 8 TUTORIAL WITH DVC SYSTEM:

FREE!



DVC.UK.COM

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There are only a couple of parking spaces directly in front of the office. For open days we suggest you park on Bexhill Road or Sandhurst Avenue

FREE PARKING ON BEXHILL ROAD

FREE PARKING ON SANDHURST AVENUE



At this corner you should see the sign to "new industrial units"

