

Edition's Main Features

Pinnacle Edition's latest version of Edition, version 5, is about to be released. It has the familiar Edition features and interface along with a vast array of real time effects, and extensive DVD writing facilities built into the program.

Edition has an interface that you either love or hate. It is similar in many ways to Adobe Premiere, although has the more professional feel to Avid's Xpress DV, and indeed borrows many of its advanced editing features from Avid. The biggest difference between Edition and Premiere is the lack of drop down menus - in Edition everything is accessed via right clicking with the mouse. At first this can be slightly confusing because you have to know where to right click to access a particular menu, but when you get to know the program it can speed up editing.

The new version will work with a standard OHCI FireWire port on a PC- to get output to DV you would need to add a DV deck/camera or an analogue to digital converter like Canopus ADVC100 - or with Pinnacle's Edition Pro card. The latter is a specialised AGP graphic card which give you analogue in an out of Edition. Without this card all Edition's effect are only displayed on your PC screen, so it becomes fairly essential for any desktop system.



Realtime Effects

The addition of realtime effects is one of the biggest advances with version 5. Edition uses a combination of hardware and software based effects. The hardware based effects are all the moving filters - 2D and 3D picture in picture effects, page curls, lens flares, and many of the Hollywood FX. The software based effects are for filters like Chromakey and Lumakey, advanced colour correction, transparency etc.. This is similar to the way Matrox RT.X100 works with Premiere, however, rather than produce a dedicated PCI based card to get for this Pinnacle have used the computer's graphic card to do the work. Graphic cards have a lot of power built-in for moving vast amounts of pixels around at high quality - designed mainly for games of course - but Pinnacle have said why not use this power for video effects.

The disadvantage of this approach is that the only way to get these effects out to a PAL monitor is to come directly out from the graphic card - hence the special AGP graphic card. Unless you have this graphic card the effects will only be shown on your computer screen until they are rendered. To output through FireWire you will also have to render all the effects. Of course Edition does all this rendering in the background while you work, so most or all of the effects will be rendered by the time you have finished editing.

The advantage is that you will be able to do multiple layers of effects in realtime - not just be limited to 1 or 2 layers as with most realtime cards. The means Edition will rival Canopus' Storm as the system with the largest number of layers of effects in realtime.

Because of this new effects engine the minimum spec for an Edition 5 machine is a 1.8Ghz Pentium 4, although the more power the better!

DV500 realtime

Edition will also work with Pinnacle's DV500. Instead of using the graphic card the DV500 does a lot of the work whilst editing, which means it will work on a much lower spec machine, however, the DV500 version WILL NOT have any of the new realtime effects, not even available for rendering. I cannot see anyone wanting to buy a DV500 Edition system from new, although it is nice that existing users at least get all the other updates with version 5: scene detection, DVD writing etc..

Although the level and quality of the realtime effects is important the biggest thing that distinguishes an Edition system from a Premiere based one is the program itself and its editing features.

Pinnacle Edition is an excellent editing program that works along similar lines to Adobe Premiere. Originally developed by Fast for their range of broadcast editing equipment, Edition is now owned by Pinnacle, who have brought down the price and added excellent DVD authoring.

Edition only works with limited hardware. It will work with OHCI FireWire cards - such as the one present on DVC Laptops or the one supplied with the software. With this hardware you only have DV in and DV out and you must have a camera or deck capable of recording back through the firewire socket to get your video back to tape.

Edition will also work with Pinnacle's DV500. With this you will have analogue in and out as well as some real time effects when outputting through analogue. Wipes, dissolves and one layer of titles will all happen in real time with the DV500. As with Premiere you will have to render all effects when outputting through firewire

Instant Save

The program saves the project every millisecond so that even if the power fails completely you can just restart the machine and carry on.

Background rendering

Edition will render all effects while you carry on working with no ill effects on the current project. Unlike Premiere it does not work with any real time cards so all effects have to be rendered but at least you can carry on working while this happens.

64 Levels of Undo per window

You can undo previous actions on each window, and these actions are also saved when the program is turned off! The new undo history will show you a list of everything you can take back.

Nest timelines within timelines

Break your project up into smaller chunks and add each one together in a new sequence, or apply an effect to a whole bunch of clips just by nesting them in a container.

Extremely customisable interface

Change the buttons, keyboard short cuts, practically everything and take these changes with you to other work stations.

Uncluttered Interface

The layout of the Windows is fixed which at first I thought was a disadvantage but now I believe is a positive boon. In Premiere and especially AVID you can become overwhelmed by windows everywhere - not so in Edition.

X-Send Clips

A special function where clips can be sent from within Edition directly to many other programs, especially, After Effects and Commotion.

Decent Audio handling

Edition splits the audio into left and right channels on the timeline so that each can be worked on individually. Also you can globally change the audio level and map the output channels to all left/right or completely mono.

High Quality effects

All the effects are sub pixel rendered so you get exceptional quality even on slow moving crawling titles.

Off-line clips

Edition is excellent at using the timecode burnt into clips and allowing you to leave clips on the tape until needed, then quickly digitising them.

Consolidate and condense

Capture all of your tape and then pick out the bits you want and delete the rest. Edition is full of excellent tools to do just that.

DVD Authoring

Write a DVD from within Edition - just press a button and Edition will encode your video and write the disc. It will even work out the data rate needed to fit the footage on the disc! or use the new versions built in menu facilities to create complex DVDs while you edit.

Common Questions

Does Edition work with the DV500 or Pro-One?

Edition V5 does work with the DV500 but it does not have any of version 5s large range of realtime filters and the program is not as slick or responsive. DV500 users would be best advised to upgrade their boards to Pinnacle's new Pro board which will use all the new Edition's features and be much nicer to use. There will be a lost cost upgrade path for DV500 users to the new AGP board for analogue in and out plus RT effects. However, you will need the minimum of a 1.8Ghz Pentium 4 to use V5, so may need to update your computer.

Can I use Premiere on the same system as Edition?

Yes, although you cannot use Premiere at the same time as Edition. It is better to just stick to using one or the other.

Does Version 5 come with Pinnacle Commotion and Impression Pro like v4?

No. The old bundle represented extremely good value and we always advised people to buy the software while they could. Both Commotion and Impression still exist and both still do things you cannot do in Edition - Commotion for painting on video and compositing and Impression for more complex DVDs

Can you run Edition on two screens?

Edition is very good at running on two screens, however, with the new AGP board to get proper 2 monitor output you will need to add a second, PCI, graphic card to your system. This is because the graphic card is already doing a lot of the effects work.

Can you use MPEG clips created in other programs with Edition?

Edition does allow you to load MPEG streams and put them on the timeline to use with the DVD writing side of the program, however, it does become rather sluggish in doing so. It is much better if left to encode video itself. Edition's MPEG encoding is pretty good, although it has to be said stand alone programs like Canopus ProCoder are better.

Can you have multiple audio and video streams?

No. You can only have one video and one audio stream. You can have multiple streams and subtitles if you use **Pinnacle's Impression Pro**.

Does it handle AC-3?

No, Edition encodes to MPEG audio or uncompressed. Edition's DVD writing is not as easy to use as a program like Ulead's DVD workshop but the whole point is that creating your DVD becomes part of the editing process. Chapter points are placed whilst editing and as they can be anchored to the clip, if the clips are shuffled the chapter points move as well.

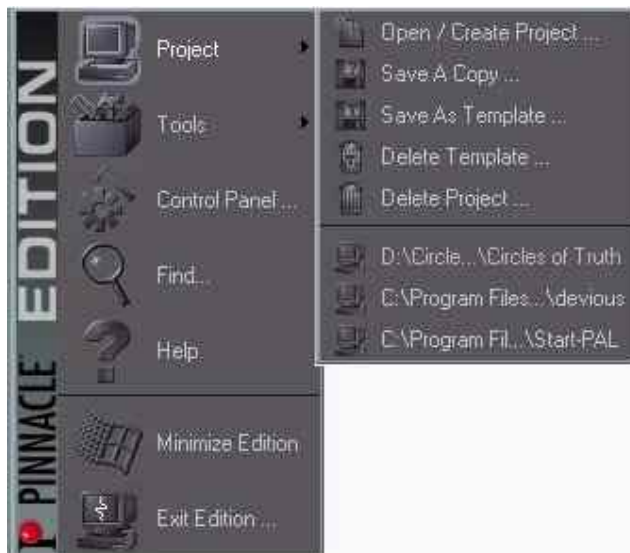
Do you do training in Edition?

Yes. We have just started offering training courses, either group or one to one, and have produced a tutorial on V4. We will update this for V5 in due course however the basics of using the two programs is the same.

The Main Interface



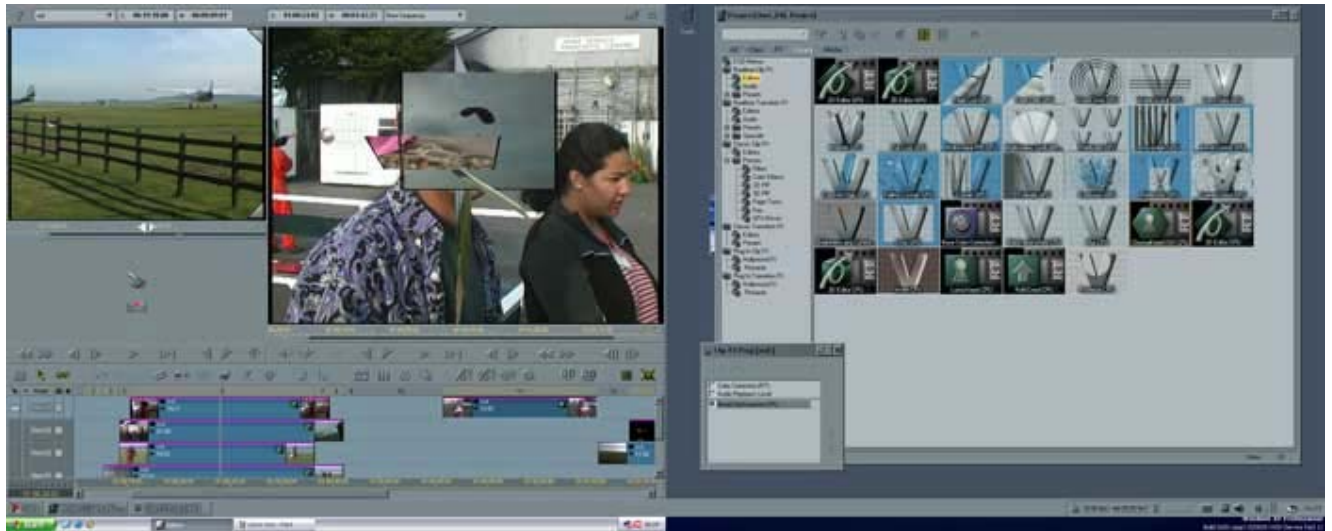
The basics of Edition are very similar to most other editing programs. The interface has a timeline, project window and source/destination windows just like Premiere. All the buttons you can see on screen can be customised and moved. The timeline is unique in that any track can have video or audio, and can be in any order. If you don't need to see the audio then simply leave the audio and video as one clip and save windows space. If you want to see the audio then a simple right click splits the audio and video into two lines.



The program itself takes over the entire screen, even adding a new start bar with a dedicated Edition start button. Transitions can be put between any clip on any track or between two titles etc. There are a large range of transitions built-in and you can of course design your own.

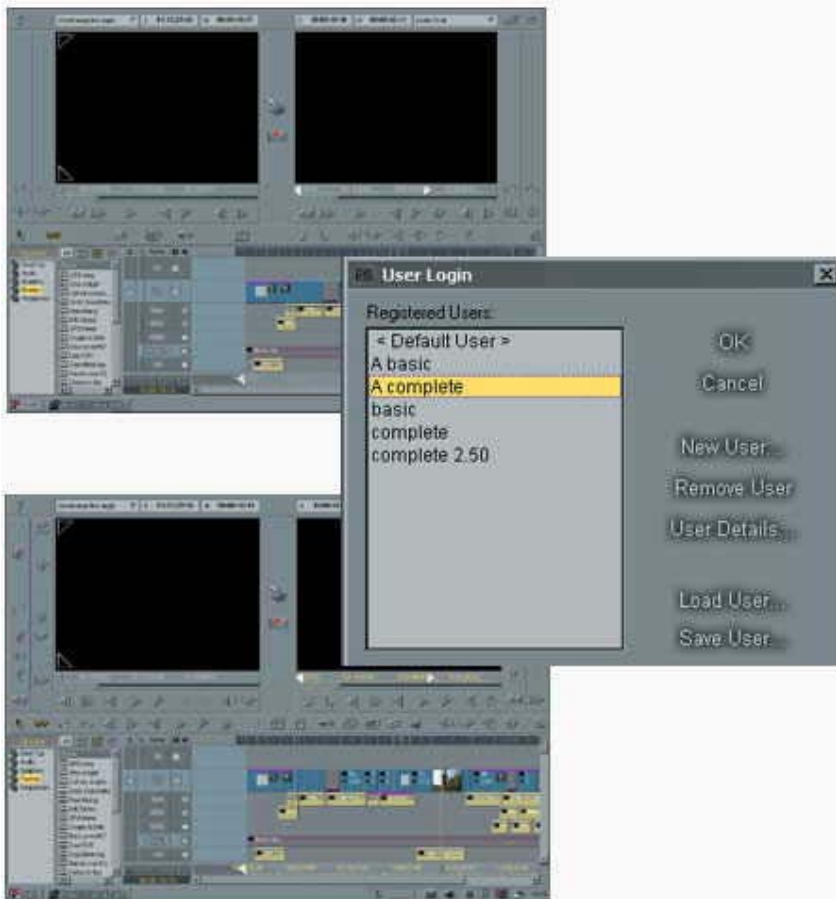
New with version 5 is the fact that the standard windows start bar still remains on screen - in previous versions it would be obliterated completely.

There are no menus at the top of the screen in Edition. Everything is done by right clicking with the mouse and a menu that relates to whatever is on the screen at that point will pop up. Initially this may be slightly annoying if you are used to Premiere because you have to right click in the right place to do what you want, however, pretty soon you begin to appreciate how tidy this makes the program.



Edition works best when the editing is spread over 2 screens. This gives you more room to spread out the different pallets. With version 5 the best screen resolution at which to run Edition is 1600 x 1200 - quite a high setting. This is because the on screen video image is then a full PAL resolution image. You have to be sure that your monitor supports this setting. You normally have to use a large (19" plus) monitor to be able to display this resolution. As CTR monitors, even 19" ones, are not too expensive this is not a problem, although you will find that 19" flat screens can be quite expensive.

At lower resolutions, although the picture looks good it is not a full video image. However, if you are running at a lower resolution you can expand the timeline viewer as shown here to full size. Edition then re-arranges the other windows to fit. Therefore running at 1600 x 1200 is desirable but not essential.



If using the **Edition Pro AGP** board - our recommend configuration if using a desktop machine since all the realtime effects can then be seen on a TV attached to the PC - you will need to add a second graphic card to your system to get dual monitor display. This is our default syetem configuration.

USER INTERFACE

You can customise the interface and then save your customisations. A few customised interfaces are already included. For example you can start with a basic interface and by logging on as a different user, this can change to and interface with more options.



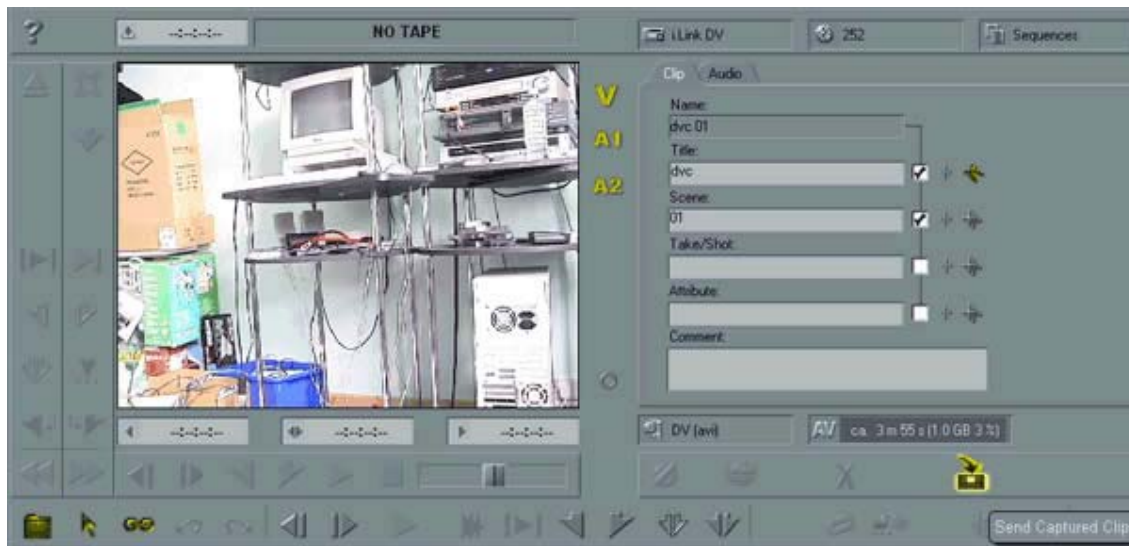
Capturing With Edition

The first step in making a video is to capture the footage. Edition has very good capture facilities built in. You can either capture footage live or batch capture by marking in and out points whilst watching the footage, then getting Edition to do all the work.

Edition 5 works with either Pinnacle's dedicated "Pro" board - a specialised AGP card which has analogue in and out as well as DV in and out - or with a standard OHCI card. If the latter then you will only have DV in and out and will have to make sure that you have a camera or deck that can take video in through the FireWire as well as transmit it. Many cameras are capable of this although some are not and if yours is not then you will not be able to get any video out of the computer!

You can also buy a device like the Canopus ADVC100, which is a dedicated analogue to digital converter, which will allow you to capture and out put footage in analogue with just an OHCI FireWire card installed in your computer.

Capturing in Edition is called logging - the idea being that you start your camera and log all the shots into the computer before capturing - but you don't have to work this way. My preferred way of working is to capture the entire tape, then sift through it on the PC and choose the parts I want to keep. There are specialised tools in Edition for either then discarding all the unused sections or going back and recapturing just the parts you want to keep.



The logging window takes over the top half of the screen. On the left we have all the controls to operate the video deck (play, stop etc..) Which are under the window showing the preview of the incoming video. On the right the boxes that control the clip naming, which as you can see are quite extensive. You can enter a comment in each box and Edition will make a clip name out of these comments. If you add a number here you can make Edition automatically increment it with every new clip captured. You can also set presets for these fields if you are doing a large number of clips. It is small but extremely useful time saving options like this that make Edition a very nice program to use.



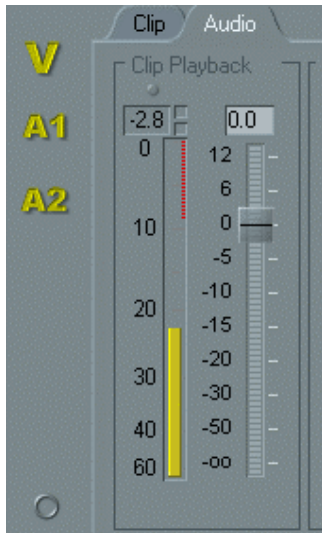
This icon, situated under the clip presets is extremely useful. As you capture each clip can automatically be added to the timeline, either over writing what is there or inserting itself between two clips. You can move the play head up and down the timeline choosing the insertion point as you capture.

LOGGING CLIPS

Clips can either be captured just by pressing the record button, or logged for later capture. You can also start the computer capturing and **while it is still capturing** press the log tool. One press will mark the start of a clip, the second will mark the end. When you finish capturing you will be left with one large clip - the entire capture - plus lots of smaller clips from whenever you pressed the log button. This is a great and quick way of roughly dividing up your footage and getting it on the machine ready to edit at the same time.

Because of Editions multitasking abilities you can add comments, change names etc.. all while Edition carries on capturing.

AUDIO LEVELS



Audio levels can be adjusted as you capture. This is not normal for DV clips because as you are copying the footage from one place to another you normally do not have the chance to change it. Edition allows you to do so; this can also be undone after you capture.

Edition can capture from all 4 audio tracks on a DV tape if required although as a default it is set to just the main 2 tracks. Audio can be set as Stereo - a left channel set all the way to the left, and a right channel set to the right, or as mono - the left and right channels from your source are still captured but both channels are panned to the centre - extremely useful if, for example, you have a directional microphone attached to one channel of the camera. Once captured both left and right channels can be seen on the timeline.

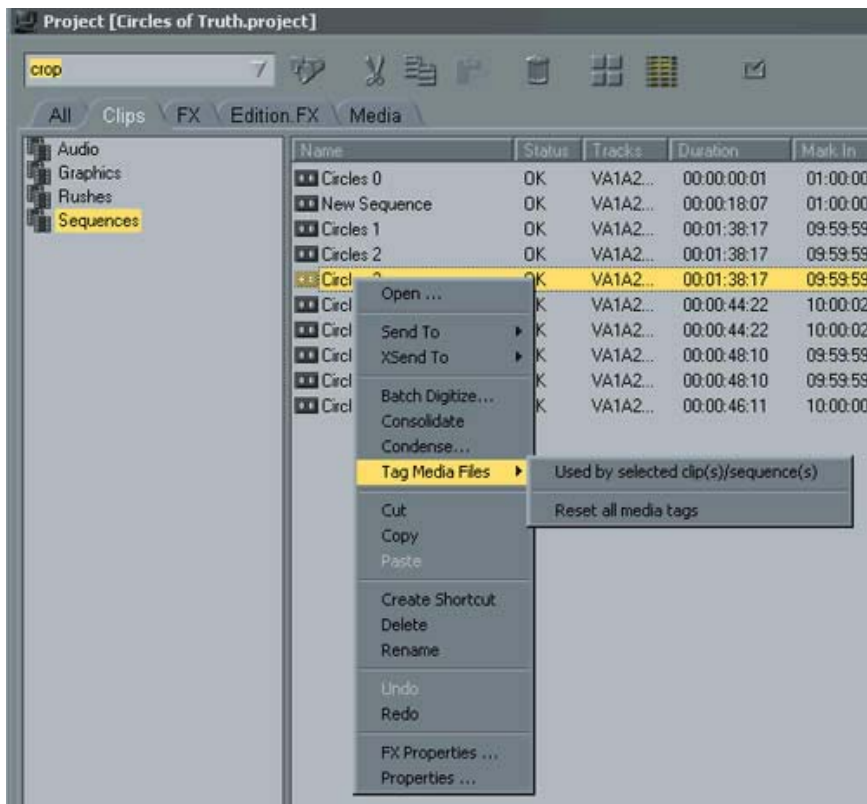
“METADATA”

Unlike Premiere the clips in your project list are different from the files on the hard drive. You can have many clips listed but not yet captured to the hard drive. When you look through your tape using the logging tool you can simply be logging the clips for later capture or capturing them and splitting them into sections. At any time you can delete the files from your hard drive, leaving all your clips and projects still intact. The clips can be referred to as metadata - which means just pointers to the real data behind the scenes.

If you want to remake the projects then you choose the clips you want and Edition will run off and capture them for you, prompting you for the tapes needed and rewinding accordingly. Edition is extremely reliable at doing so and this makes the program a great off-line editing tool.

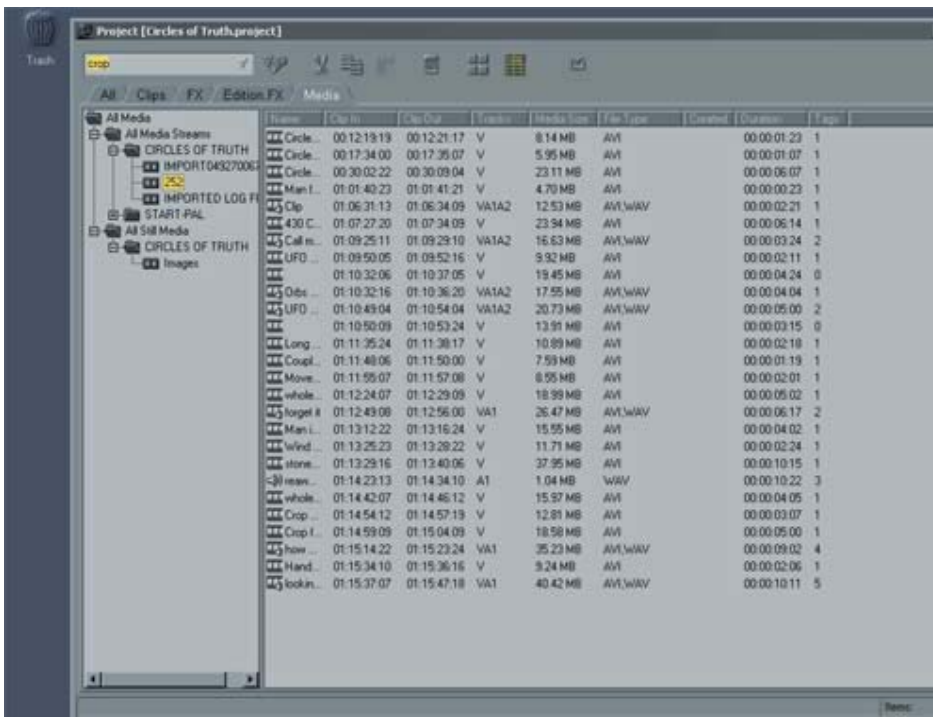
[Avid Xpress DV](#) is just as good at dealing with off-line clips as Edition, where as [Adobe Premiere](#), although it has the ability to do the same things is not nearly as good, reliable or transparent for this type of operation as Edition.

Media Management



Edition has a **Media Management** tool for you to control your files on the hard drive. This can be very useful - not matter how much hard drive space you have on your machine you will find a time when you don't have enough! With other editing programs when this happens you have to go through selectively deleting clips and hoping that you do not accidentally delete a clip you actually need. Alternatively you may want to find a clip that you know is on the hard drive somewhere but you can't remember where you put it. The Media Management basically lists all the clips on the hard drive ,with a representative icon, and complete with a handy find tools that allows you to perform complex searches through the media. Once you find a clip you can bring it into your existing

project.



If you want to make some space by getting rid of any footage that you are not using you can go to your sequence in the project window and get Edition to tag all the files just used in that sequence. In Media Management these are now all tagged and you can then choose to delete all the footage not used in this sequence.

Deleting in this way does not get rid of your sequences and clips for other projects it just gets rid of the media file. The 'metafile' is still there and you can select the ones you want and get Edition to recapture them from your DV tapes.

Editing

Once the footage has been captured you are ready to edit.



for example.

Clips can be loaded into a clip window, where in and out points are set or into a traditional source/player window like Adobe Premiere and Avid Xpress DV. Clips can also be played in the ICON view in the project window and you can even set in and out points within this window.

Here you can also see one of the new additions in version 5 of Edition. You can colour correct a clip in the clip window before it is placed on the timeline. This means that rather than looking through a large number of clips and correcting the colour one by one you can fix the entire clip first then use it. Of course, the same type of colour correction is also available to apply individually to clips on the timeline if you prefer.

The colour controls are split into highlights, midtones and shadows with controls for adjusting the overall brightness, and red, green and blue levels of each brightness level. This is good for brightening up the midtones whilst not making the overall clip too bright,

Scene Detection



Another new feature for version 5, Edition can detect scenes in your video either based on the date and time the footage was recorded (provided you set the date and time in your camera in the first place) or based on picture content. The date and time splitting (referred to as based on metadata) is more accurate and can be done either during capture or afterwards. The picture content scanning can only be done post-capture.

Asking a computer to find scenes by watching the video is never going to be 100% accurate - it may mistake a whip pan for scene change or not detect a change because very little in the shot actually changes. The sensitivity can be altered so it will look for large or small changes and you can specify a start and end point on your clip so you can analyse it in small chunks. Finally if you are not happy with the findings you can remove the scene markers or add your own.

Once scenes have been detected you can then get Edition to split

the clip into either whole clips (known as Master clips) or subclips. Subclips just mark and in and out point on the main clip and produce an icon in the project window of this clip. This means you can still adjust the in and out point, using more of the original clip if preferred, or if the scene analysing got it wrong, but it creates a nice list of all your shots to help with later editing.

The scene detection in Edition has to be the best we have used.

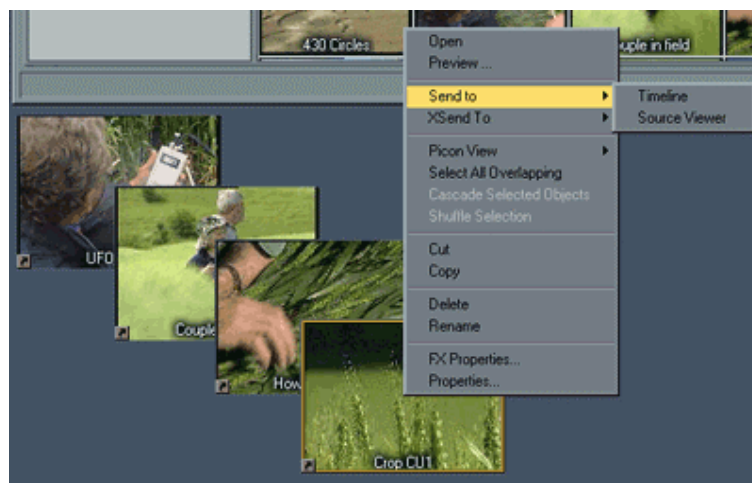
Of course you don't have to use the scene detection at all – you can still watch the clips and split them as you do so. Scene detection just helps to speed up this process.



Using the traditional clip window Edition still has a few refinements. As you would expect, apart from the usual play, stop, fast forward and rewind using the keys J, K & L, you can also skip through the clip by dragging your mouse along ruler bar underneath the clips. However, with long clips this can become very inaccurate. Edition allows you to zoom into a small section of the clip, with the long dark grey bar showing you where you are in the particular clip. This is extremely useful, especially when dealing with large clips.

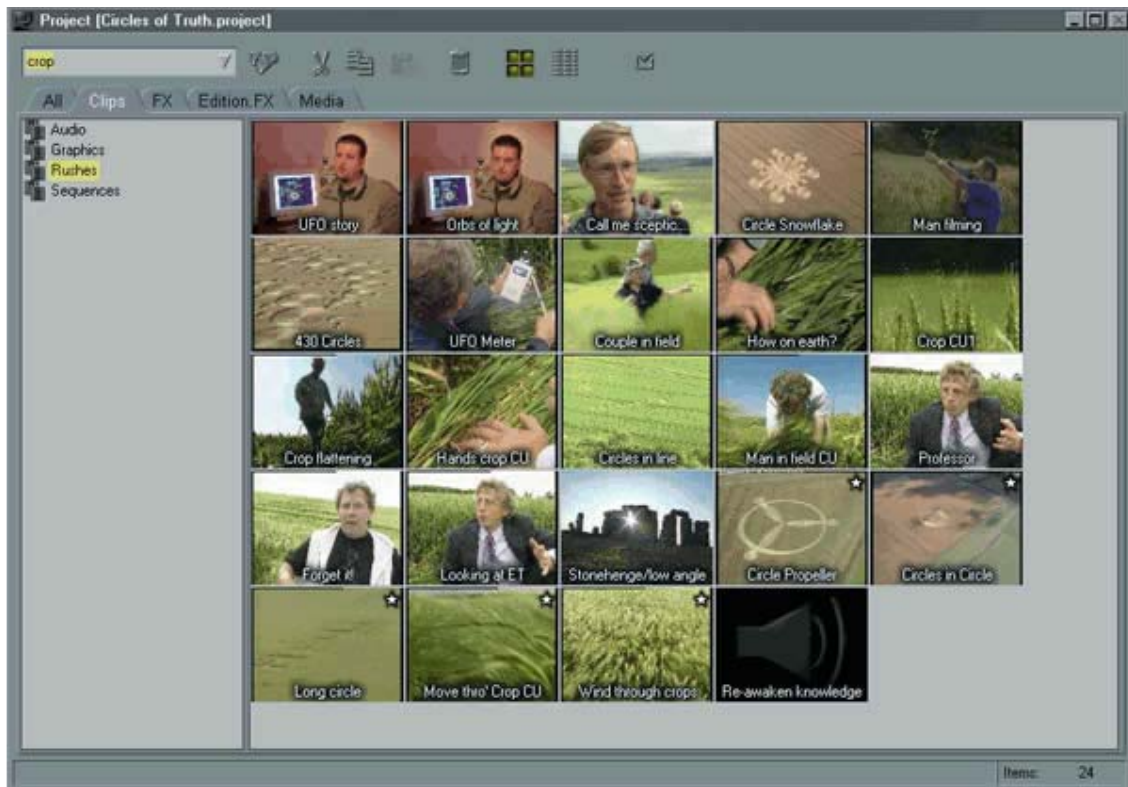
You can also drag anywhere in the picture area to move through the clip and you can use the wheel on your mouse to move forward one frame and back one frame at a time.

Storyboarding on the desktop



Alternatively you can drag several clips to the desktop, play them within their icons, set in and out points and arrange them in a simple fashion right there. Once you are happy with the order then you right click and either choose to preview the edit as it stands - a clip window then appears with all the clips ready to play - or you can send the lot to the timeline top refine the edit. This makes very simple quick storyboard editing.

THE PROJECT WINDOW



Clips can be displayed in various ways, although the simplest is the icon view as shown. Even if the clip has only been logged and not yet recorded onto the computer the icon will still be shown.

You can create folders for different, re organise, copy clips from one folder to another etc.. You can even create a folder of all the clips used in a particular timeline and then instruct Edition to capture just that footage.

You can play clips in the icon view if you want and even set in and out points prior to dropping them on the timeline.

Picon play



The clip here is being played right in the project window, with full output to the connected DV deck, and you can even set

The Timeline

INSERT/OVERWRITE EDITING

Like **Avid Xpress DV**, Edition can work in either **insert** or **overwrite** modes. If inserting footage you set an **in** and **out** point on the footage and an **in** point on the timeline. After pressing the insert button the footage is placed on the timeline and all the other footage is moved to accommodate it. You can also lock tracks so that all tracks are effected or just the selected tracks. Overwrite will overwrite existing material. Premiere can work in the same mode but it does not encourage you to do so, where as Edition does. If you are used to Premiere this may take a little bit of getting used to; AVID users will be intimately familiar with it.

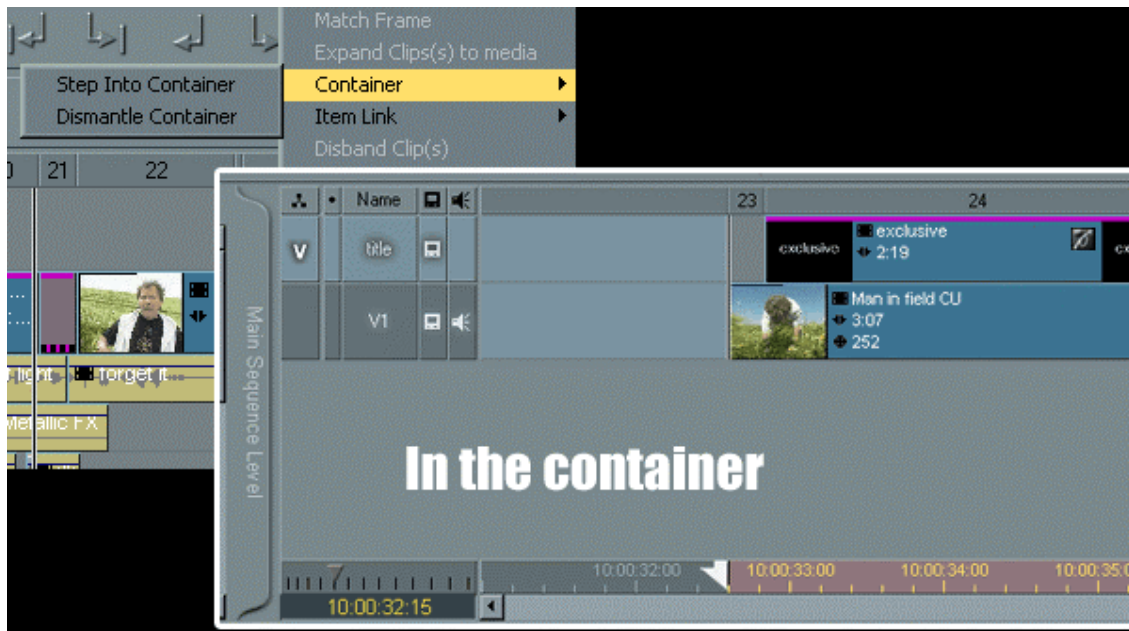


GROUPING CLIPS

Clips can be inserted grouped or ungrouped. If a clip is grouped the video and audio occupy one track. You cannot see the audio as a waveform but you can manipulate both sound and picture. This saves screen space. Clips can be 'disbanded' so that you can see the audio as a separate file and then you can choose to view the waveform - the visual representation of the peaks and troughs of the sound.

The size of individual tracks can be changed by simply dragging the top or bottom of the track, giving much more flexibility than with and Adobe Premiere timeline. The tracks can be repositioned by dragging and dropping as well.

CONTAINERS



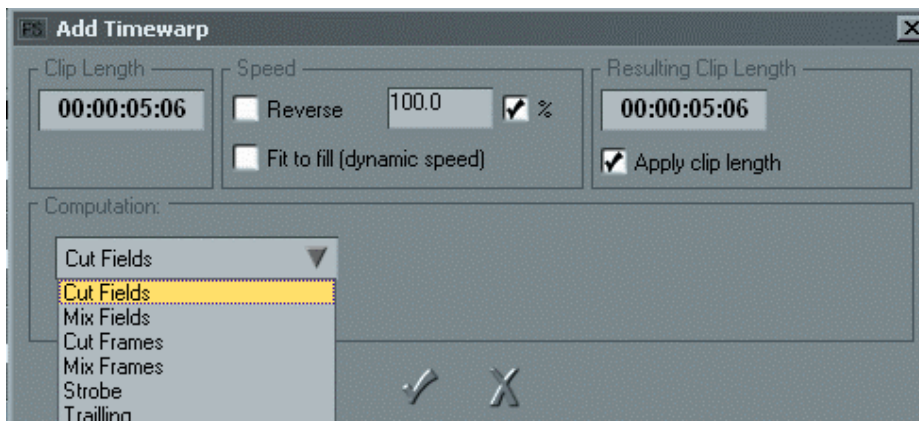
A container is a timeline within another timeline. You can create containers either by marking out an area of the timeline and pressing a button, or by dragging an existing timeline into a new one. You can choose to 'step into' the container which opens up into a new timeline. The container can be manipulated just like any other clip - you can add effects, picture in picture etc. and these will be applied to all the clips in the container. Containers can be incredibly useful tools for keeping your main edit tidy.

TRANSITIONS



Transitions can be placed between two adjacent clips on the same timeline, and can be added to clips on any time line, not just the A & B tracks as with Adobe Premiere. This means that any transition available can be used, for example, on title.

SLOW MOTION/TIMEWARP EFFECT



Slow motion can be added to clips on the timeline. These can be either set to certain speeds to set to fill the space provided. There are various ways of rendering the slow motion, as shown here. This can produce some very high quality results only rivalled by the real time slow-motion available with the [Canopus Storm](#) or [Matrox RT.X100](#).

Realtime effects

Edition uses a combination of software and hardware for its realtime effects. Hardware based effects are mainly motion based – using the graphic chip in your computer to do what it is good at essentially. Software based effects are for things like colour correction, chroma and lumakeying and blurs.

All the effects play back on your computer screen only unless you have Pinnacle's special **Edition Pro** AGP card, when all effects play to the TV or monitor attached to the breakout box. For this reason we recommend using Edition with the Pro board. If you do not have the pro board you will not see your effects on TV until they are rendered – not even a still image as parameters are adjusted. This is ok for motion paths but not so good for judging colour correction for example. The on screen display of the video image is exceptionally good in Edition, the best of the any editing program we have used, but is not a proper substitute for a TV.

The effects render in the background so you can carry on editing and get the final video at the end of the edit ready to record to tape anyway, although obviously devices like the **Storm** or **RT.X100**, which can play RT effects down the FireWire as well as to the analogue connections will not have to render before recording to tape. Background rendering almost makes up for this lack of **RTDV** output; **RTDV** would have been nice but nothing is perfect!



If you tick this option, render yellow slices then the RT effects render while you work. Of course this will mean that you can play less effects in realtime because your computer is busy rendering as well but does not completely kill RT effects.

If Edition cannot play the effects in realtime then it will drop frames and play what it can. This is called "**graceful degradation**" and is better than the machine grinding to a halt if it can't play the effects or playing the video slower than it should be. Editing is all about timing and you should always see your video at the right speed even if some frames are dropped. The new **RT.X100 "Xtreme preview"** works in the same way as Edition where as **Canopus Storm** plays the video slower with stuttery audio which is not as good.



At the bottom of the screen we have two readouts – one showing you the current frames per second, and the second showing you the lowest rate Edition has dropped to. Very useful.

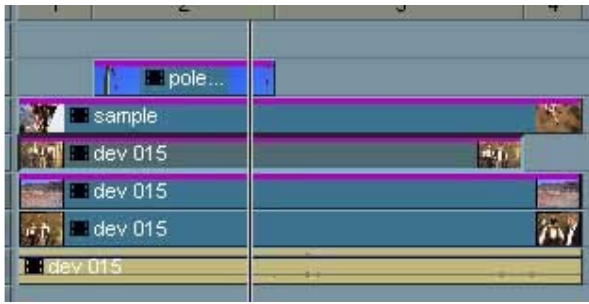
The Effects

The hardware based effects are mostly 3D based. The obvious 2D and 3D editors allow you to move scale and spin clips around. Pinnacle have very sensibly kept the excellent effects configuration screens used in version 4 – although one button missing is the ability to expand the effects set up screen and zoom in to the image for very precise positioning. These still exist in the rendering editors but not in the



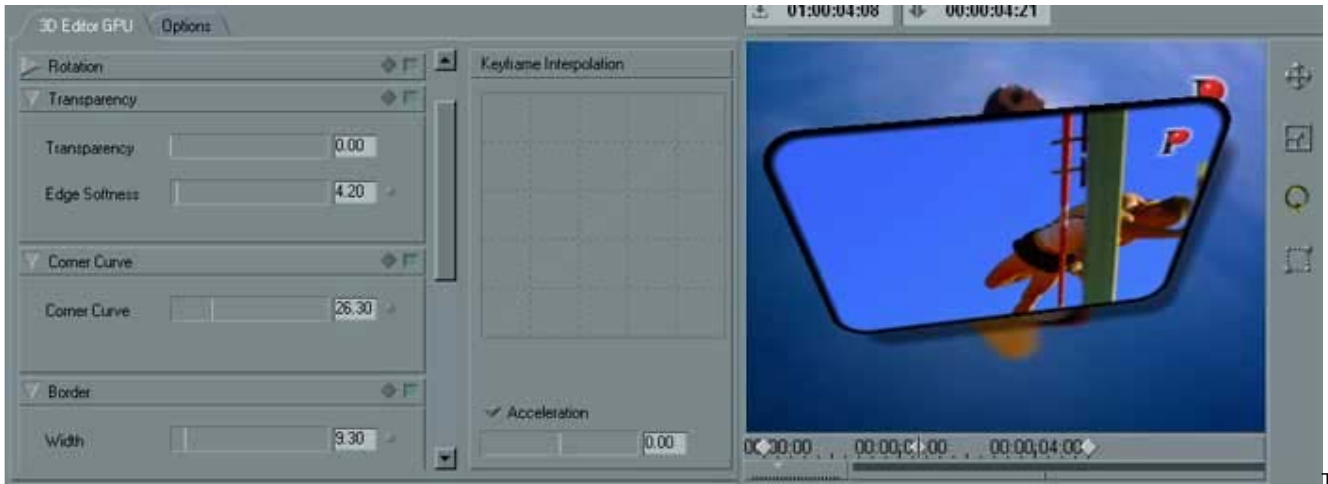
realtime.

You can see all the layers you are working on on screen whilst you edit without put to TV through the Pro board. As with the renderable effects you can easily copy and paste individual keyframe settings between keyframes or over the entire clip and have control over the speed at which you fly through keyframes using the graph in the centre of the window.



You can also switch between clips without leaving the editor . In this example of 5 clips I can set up the effect on the top clip whilst in the editor and then set up another effect on the second clip just by clicking on the clip. With a Premiere based system I would have to come out of the effects setup screen, drag the effect on to the clip then open the dialogue box – all annoyingly time consuming. Again nothing new in this as you could do this with all the editors in version 4.

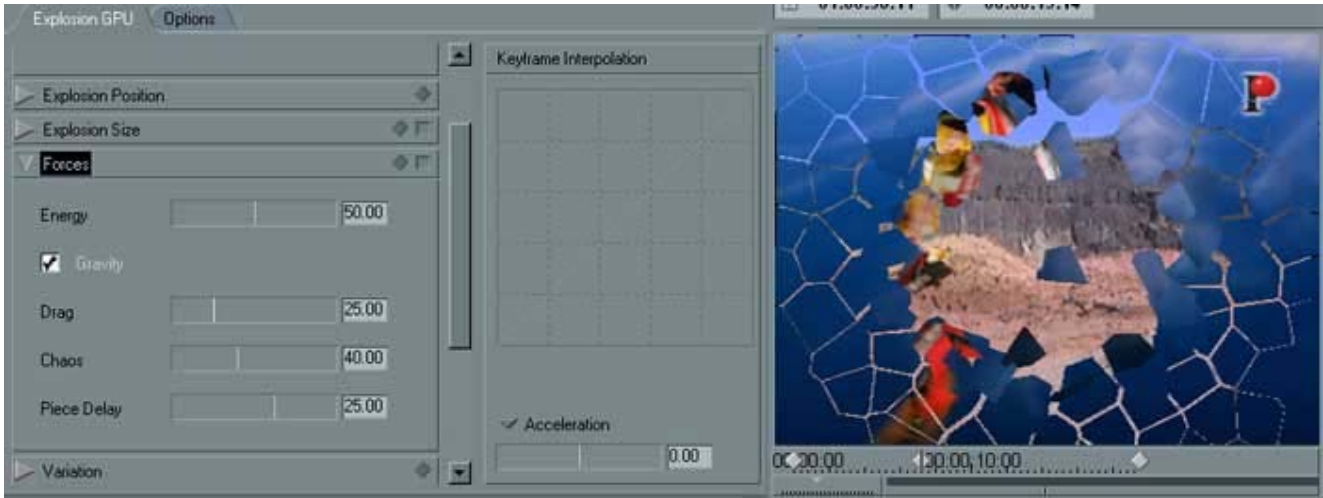
3D effects



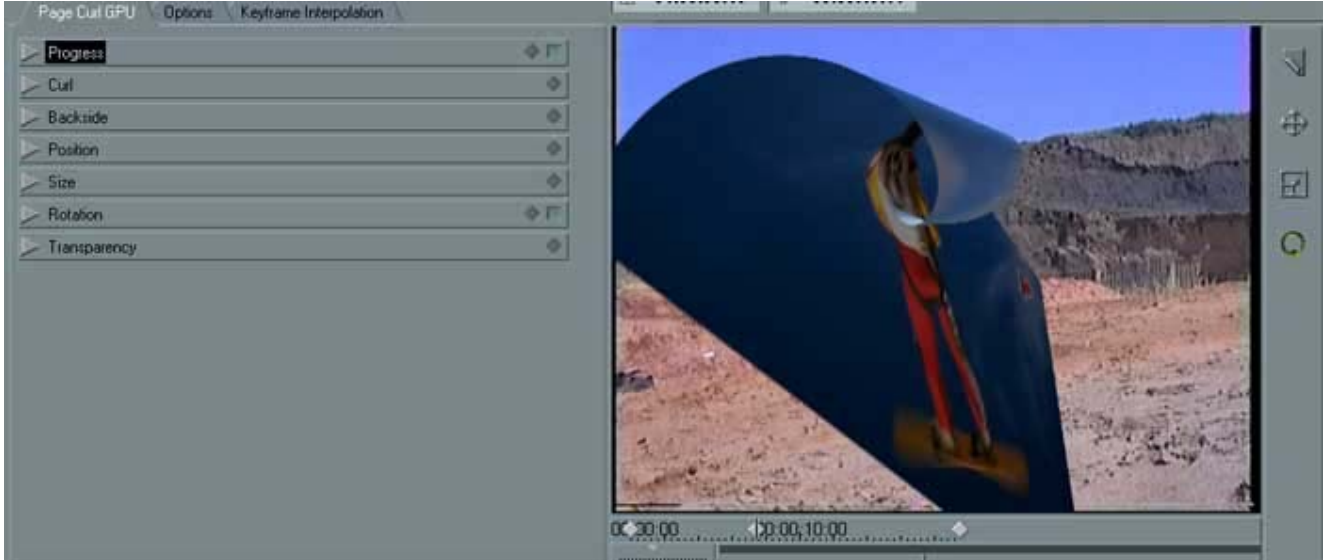
The standard 3D editor - I like the rounded edges on the picture in picture effect - great for a DVD menu.



The full list of effects editors. A similar list is available for transitions. This does not include Hollywood FX, much of which is also realtime.



There are lots of wacky 3D effects as well... This explosion effect is interesting. Perhaps more so when used on titles...



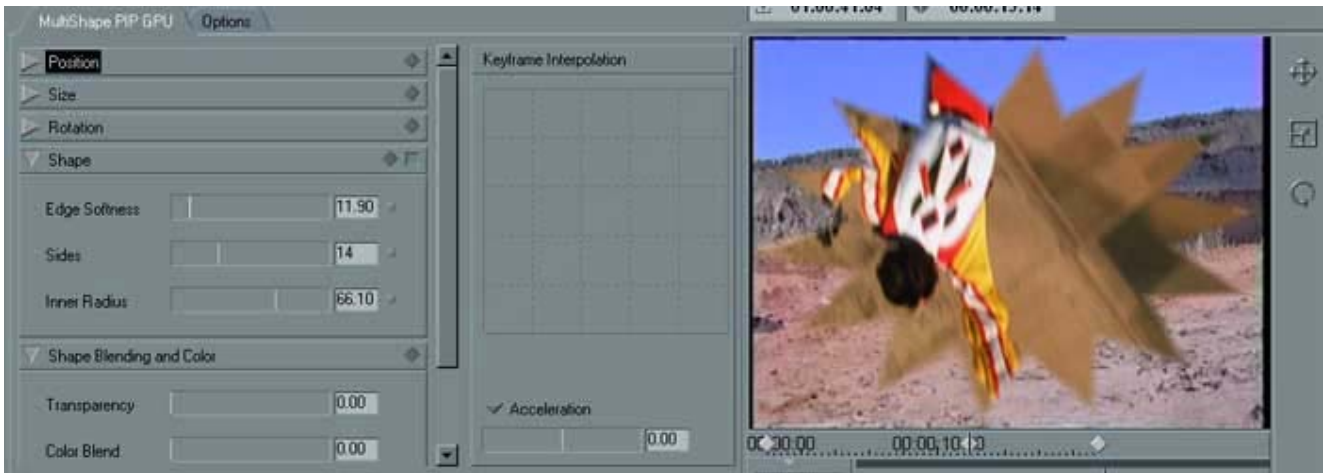
Page peels and curls are fairly obvious...



Water drop and water wave...



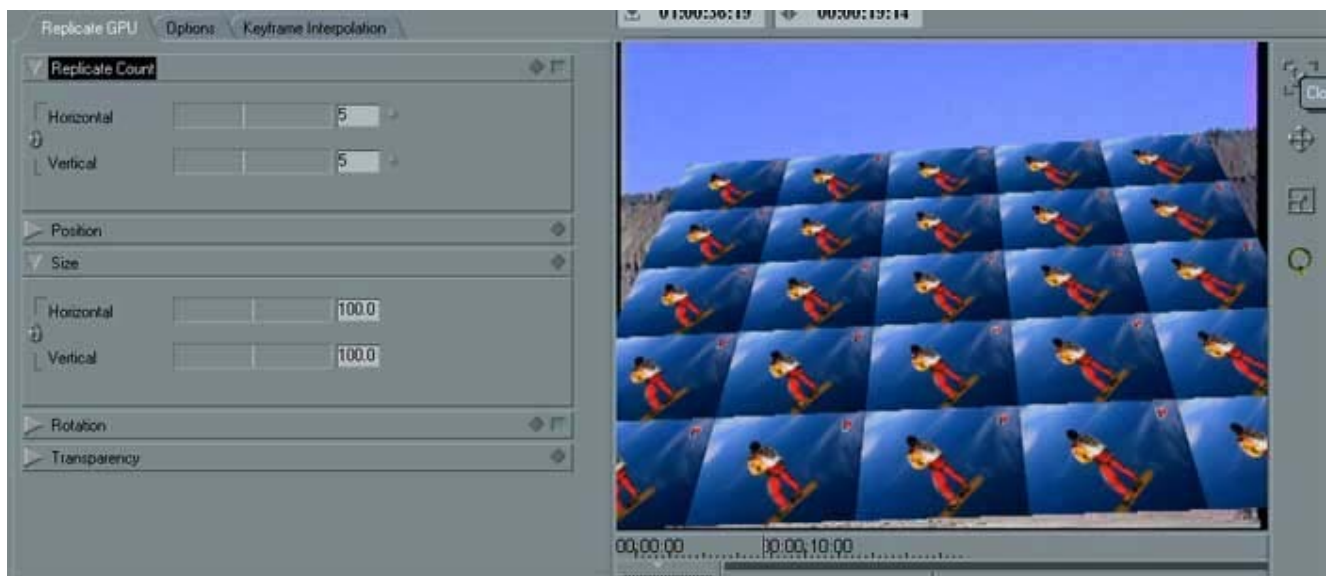
Lens flares in realtime with a significant amount of flare options similar to those offered by **Matrox** and **Pinnacle's ProOne**.



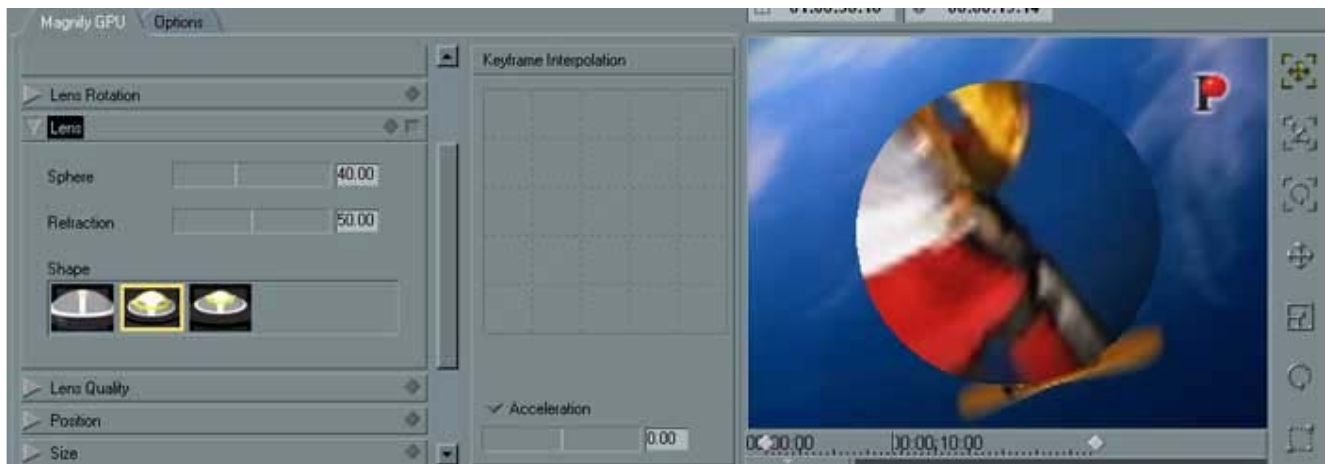
This multishape picture in picture is taken straight from the ProOne and is just as useful here...



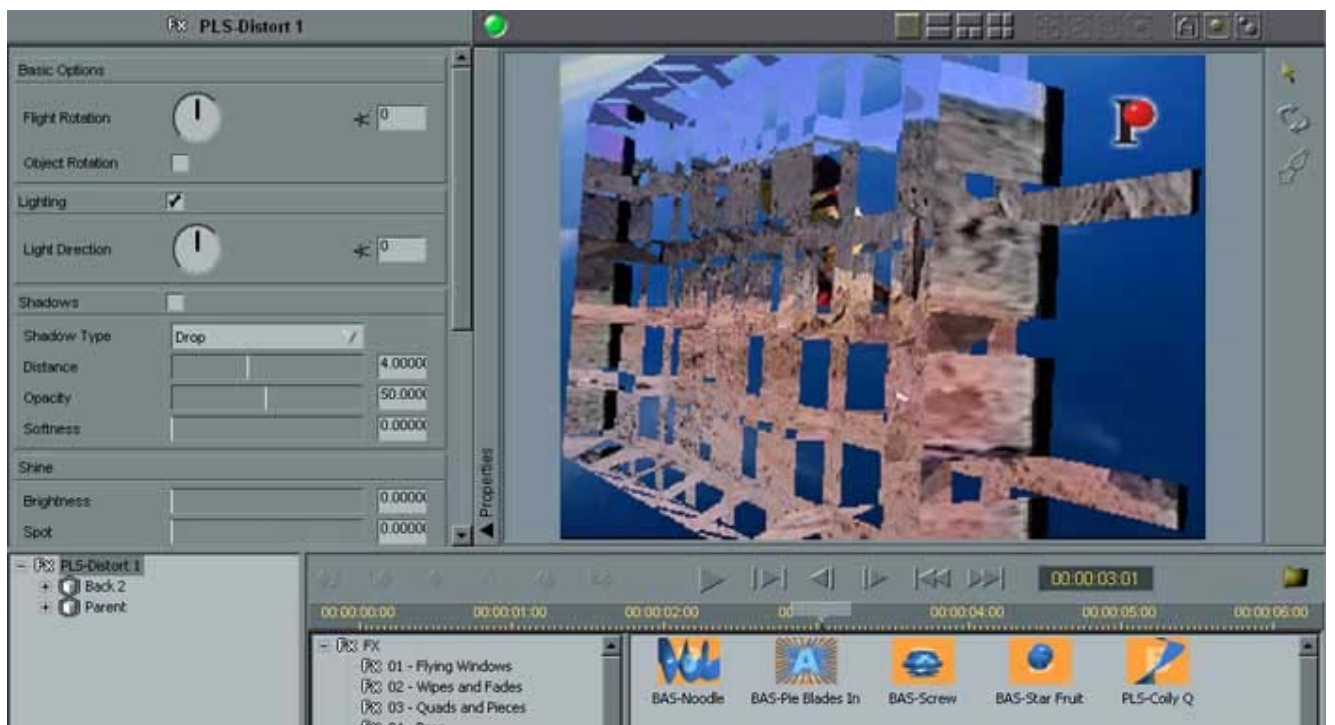
Reflection is a really nice effect, although I am not too sure when I would use it!



Replicate can be used in conjunction with other effects to produce a good result.

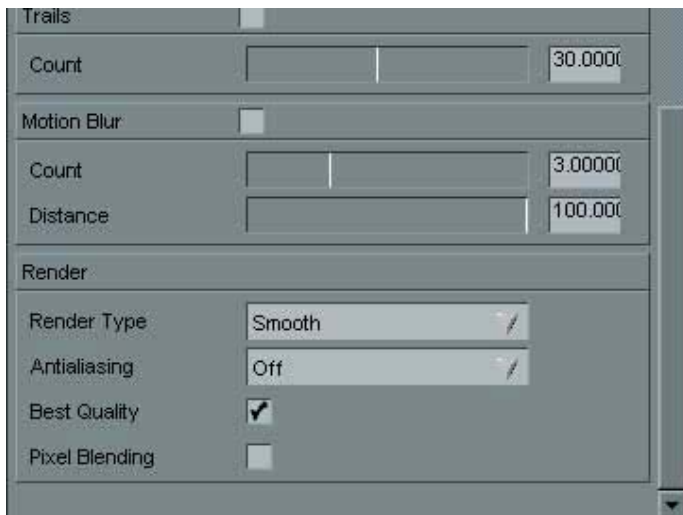


And magnify magnifies a bit of the image...



Also in realtime are many of Pinnacle's Hollywood FX. These are a huge range of wild and wacky transitions which would be very difficult to do in any other way.

The whole interface has been revamped from version 4 and many new options added.



If you turn on more advanced features such as anti aliasing or trails then the effects have to be rendered.

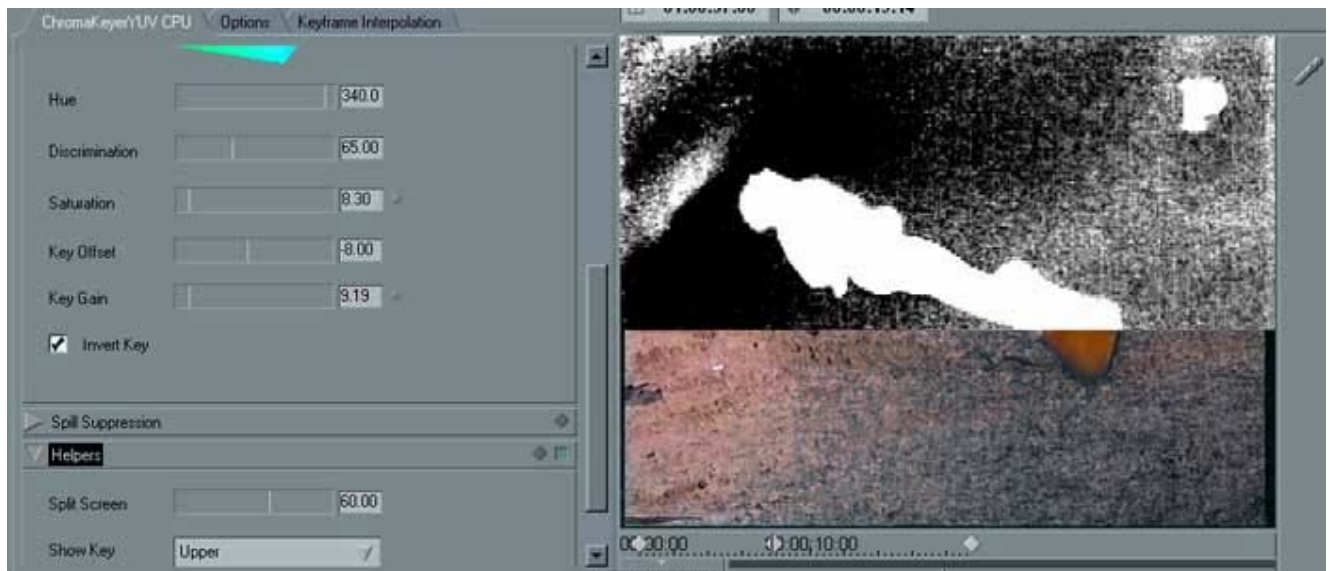


And some of the really complex effects have to be rendered anyway. This that do have a little red blob in the icon.

CPU based effects



The most useful effect is colour correction. You can adjust overall brightness level of a clip, the gamma and stretch the black to make more of the dark areas black whilst not darkening the entire image. Individual controls are also available for red green and blue as well as hue and saturation. We would like to see a one click white balance and decent colour matching added – and since these exist in Pinnacle’s own Purple software the may be added sometime in the future, but you do get pretty comprehensive control using this filter. It can be applied to the clip before being put on the timeline, or after. Like all effects you can save a preset as an icon in your library and then apply it to as many clips as you like.



ChromaKey is now in realtime – this is a totally different keyer to rendered version that came with Version 4, which still exists if you prefer to use it. The keyer has several advanced options including a “helper” which allows you to show the just the matte on screen, either on the entire screen or split as part of it. This is very useful in trying to get a good key. 2D and 3D editors also exist in software as well as hardware. These achieve the same results as the hardware based editors although they do have other options.



A realtime blur, a CPU based effect so dependent on your computer's PC rather than the graphic card.

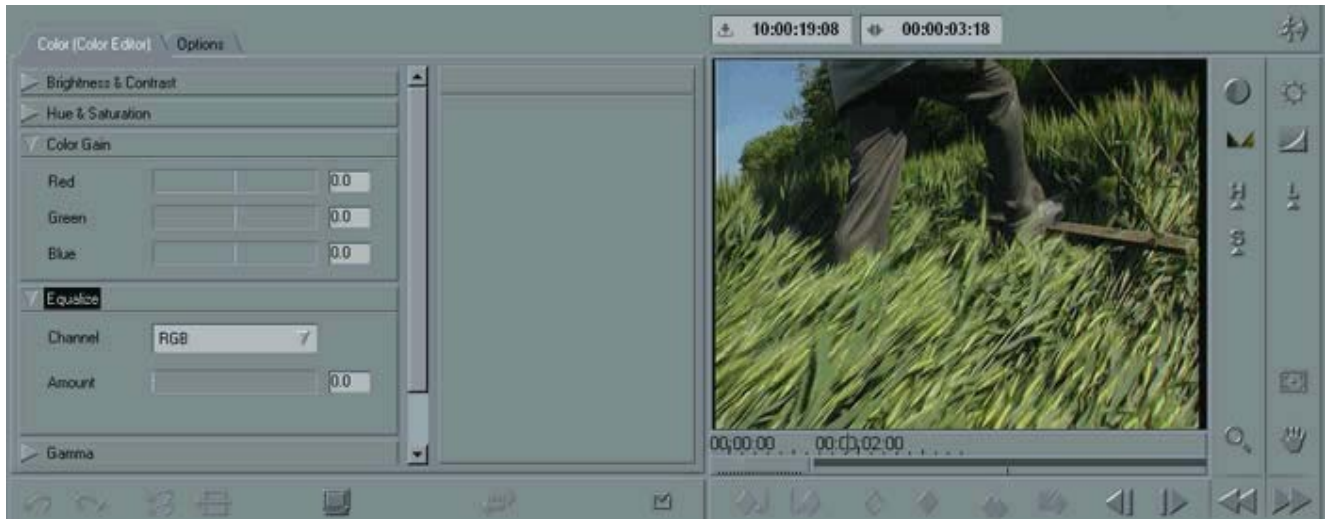
Titles in realtime

Edition's titles will all be displayed in realtime, complete with transparency. How many layers you can achieve does depend on the speed of your computer and is not limited. Any of the realtime effects can be used on titles meaning you can blow them up, blur them in, curl them on and off screen or fly them wherever you feel like. On a Premiere based system only the **Matrox RT.X100** offers the same amount of control as Edition of how titles move around screen. [Canopus Storm](#), although it can manage many layers of titles in realtime, is very restrictive on where they can go.

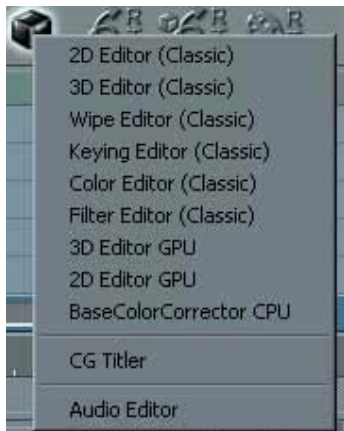
Non realtime Effects

Edition's standard FX editors still exist – all still renderable, although the major advance from version 4 is that any part that is rendered is instantly viewable, where as in version 4 you would have to wait for the entire effect to be rendered before you could see it on screen.

These effect editors still have their uses – for example really complex composites are easier because of the way it is possible to zoom into the preview screen for accurate positioning of an effect. They are also extremely useful for image pans as they will maintain the full quality of the panned image rather than down sampling it like the RT effects.



The Effect Editors in Edition all work along the same lines. Therefore, once you pretty much know how to use one you know how to use them all. The colour effect editor here is used for decent colour correction effect. On the left we have the control panel with sliders for each type of adjustment. On the right the preview screen, with buttons next to it to enable you to choose the effect you want. Instead of using the slider to adjust the parameters you can choose one of the tools and then dragging up and down on preview image changes the parameter. For example, if you choose colour levels dragging in the left of the image changes the red, middle changes the green and right changes the blue. All the results are instantly displayed both on the Edition preview screen and on the DV device attached to the computer. The final result cannot be viewed until Edition has rendered them, although as it does this in the background you can carry on working.



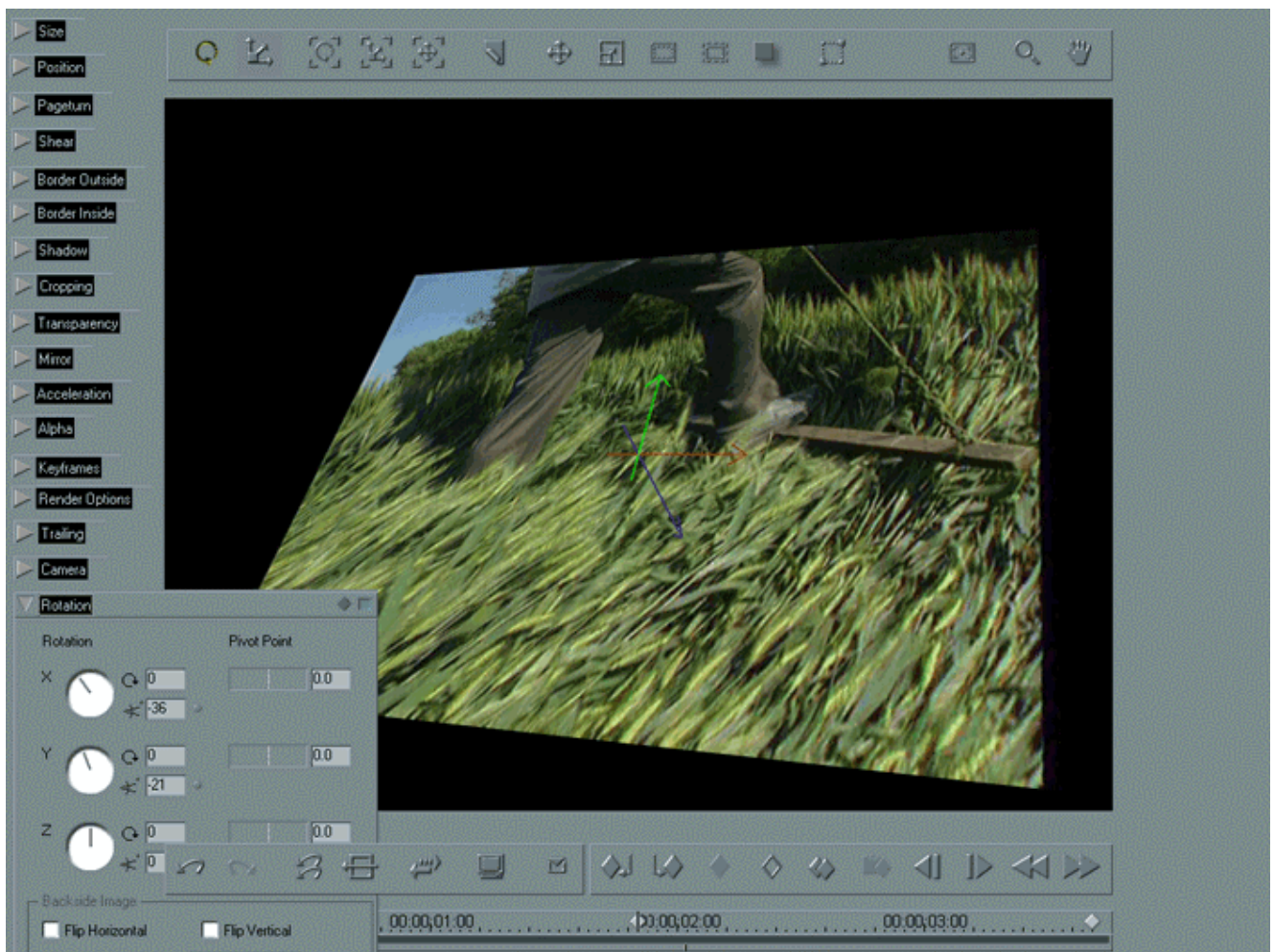
Adding a 3D effect is easy - just use the 3D editor. The 3D edition works in the same way as the other effect editors. It takes over the top of the screen and each parameter can be adjusted by using the controls on the left and dragging the cursor around the screen.

The program automatically creates keyframes so that you can create a decent moving path and has professional acceleration/deceleration adjustments to create smooth, realistic motion.

Attributes can very easily be copied between keyframes or applied to the entire clip.



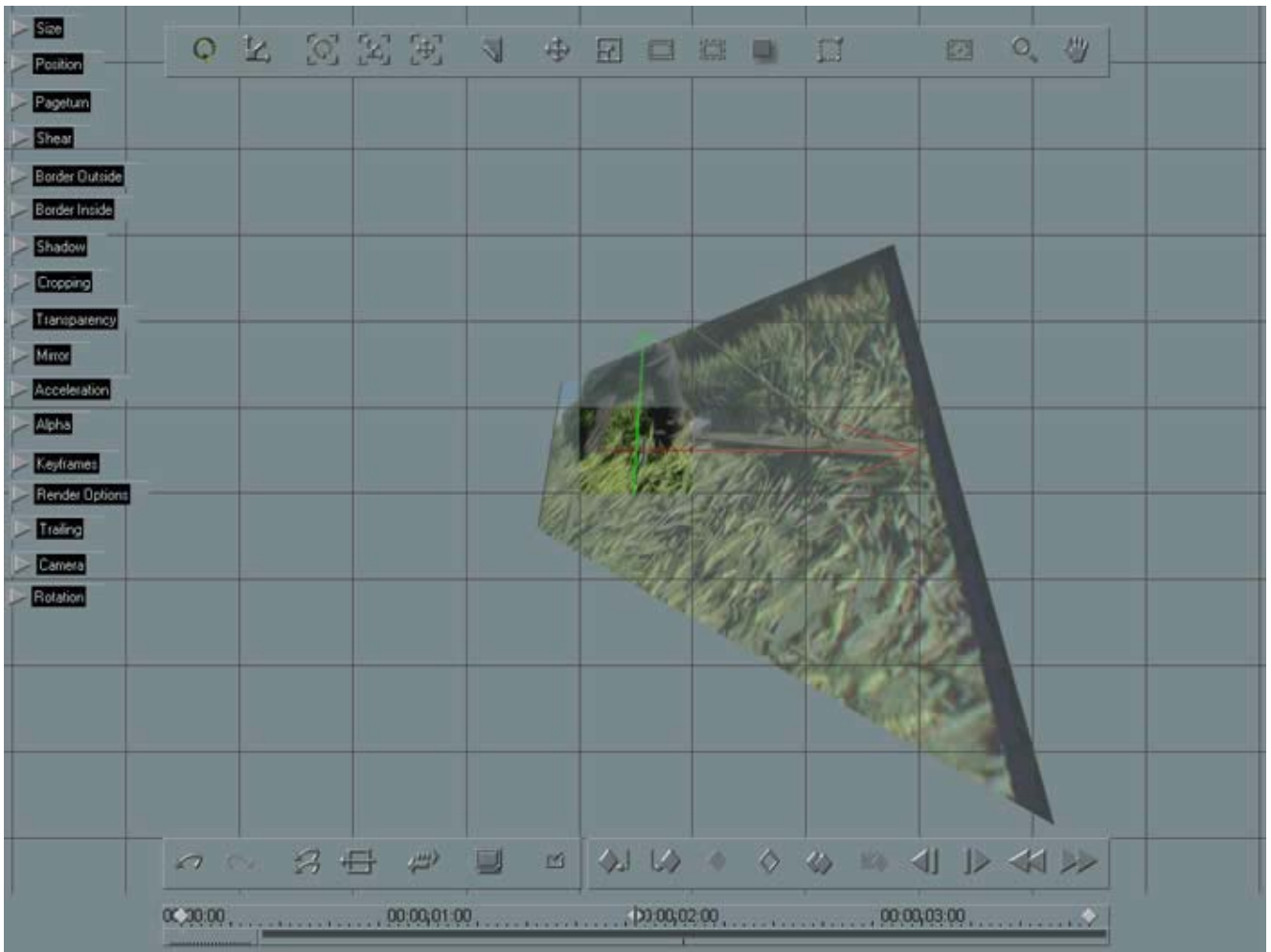
As with all the "classic" editors on click and it expands to full screen. This makes fine adjustment possible



and gives much more accuracy

You can zoom in and output of the effect window easily. Here we see a very large paste board, and in the centre the highlight section is the area that is actually on screen. Of course the on screen section is all the time being relayed to your DV device and hence to the TV.

You can also zoom in your preview area - right down to individual pixels if needs be. This makes choosing a particular pixel colour when chromakeying or accurately positioning a frame around a picture in picture very easy.



And zooming out to show the entire image in an image pan, and choosing the part you want to display is simple too..



Audio Editing



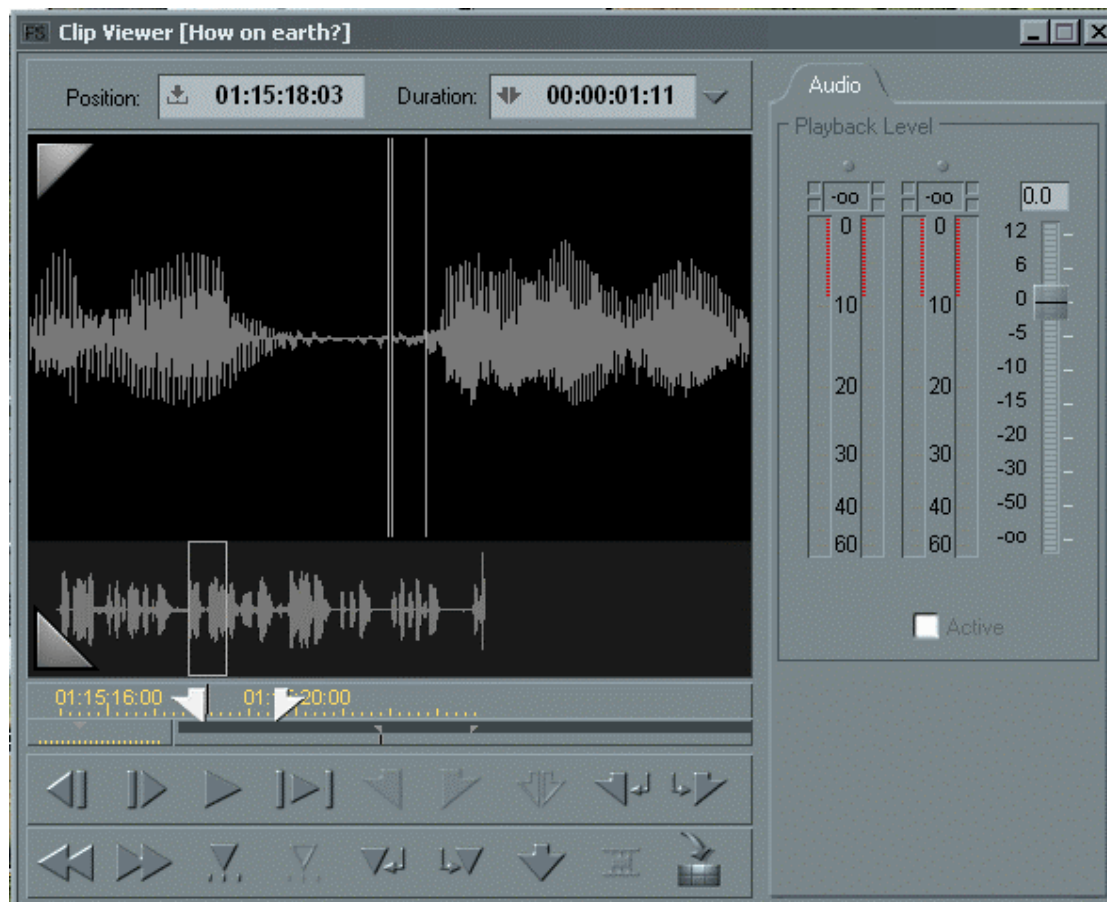
Edition has accurate audio controls. It can mix up to 8 stereo audio tracks live. The clips have a level control on them, in a similar way to Adobe Premiere, which can be controlled either by adding and moving points or through the mixer control shown. You can record audio levels on the fly in a similar manner to Premiere - however one advantage of Edition is that as it applies your audio level changes it does not add too many control points. With Premiere's live

mixing it will add so many control points that it becomes difficult to manually tweak them.

You can also record a voice over directly to the timeline - whilst speaking you will hear the sound already on timeline allowing you to synchronise.



Edition's waveform display is very accurate and also very quick to refresh. This is because when it captures a clip it makes a bitmap of the waveform which it then uses everytime it needs to display the sound, unlike Premiere and Avid Xpress DV. This means that you can work with the waveform display open and not suffer the consequences of slow update of the timeline.



You can open an audio clip in its own clip window to give a much more refined view of the clip. As you can see the lower display shows the entire waveform with the box showing the portion of the waveform in the upper display.

You can globally adjust the volume of the waveform here so the entire level of the clip is increased. A nice touch is that as you do so the visual representation of the waveform is made larger - this makes it very easy to increase the volume on the clip to maximum without distorting it.

Edition has 3 audio filters - Echo, equaliser and maximiser. These filters are high quality but a more would be useful. Premiere has more basic filters built-in as has Avid, and it is a shame that Edition does not support Direct-X audio plug-ins either. Hopefully this will change as Pinnacle has now bought **Steinberg** - a company renowned for their good audio programs.

Export To DVD

New in Edition 5 is the ability to make complex DVDs right off the timeline. In previous versions, you could write a DDV from edition although all it would do is go into your DVD player and simply play – only one menu (with a big play button on it) and no chapter points or navigation.

The new version allows you to have multiple menus, chapter points, and either still video backgrounds for the menus. The really useful part is that making your DVD becomes part of the editing process and you can make all your links and menus as you edit. Links are also frame accurate. So once you have finished your edit you don't have to go through another procedure to make the DVD! When doing our tutorials and demo DVD we have always done the edit, then encoded the footage, then thought about how to layout the DVD – in some case having to go back and re-edit the footage because the DVD, which is a non-linear format – did not match the linear way we had made the project for tape.

Making a DVD

First you add a DVD menu track to the timeline – then either use the DVD wizard or load a blank menu or a template which you can customise.



The DVD editor as shown here as many templates on the left hand side. To use one just drag it to the DVD menu track. You can either create every page of the menu yourself or if, for example, you choose a menu with 4 buttons and you have 15 chapter points, Edition will automatically create extra pages to accommodate these extra buttons. If you get Edition to create the extra pages then all the menus have to be still images ones, I.E.: no video in the background. I prefer to create my own personally. Obvious you can link to other menus or clips in the project and the links can be thumbnail buttons or just plain text or an object you have created. If a thumbnail then Edition automatically uses the frame from the timeline where the link was added as the thumbnail, although you can move along the timeline and quickly change the thumbnail to another frame at the press of a button.



Chapter points in Edition's DVD making are called anchors. These can either be completely locked to a point on the timeline, or anchored to a part of a clip. The latter means that if you insert or remove and clips then the chapter point sticks with the clip it was assigned to. Extremely useful as one of the major advantages of using Edition's built in DVD writing is that you can do it while editing.

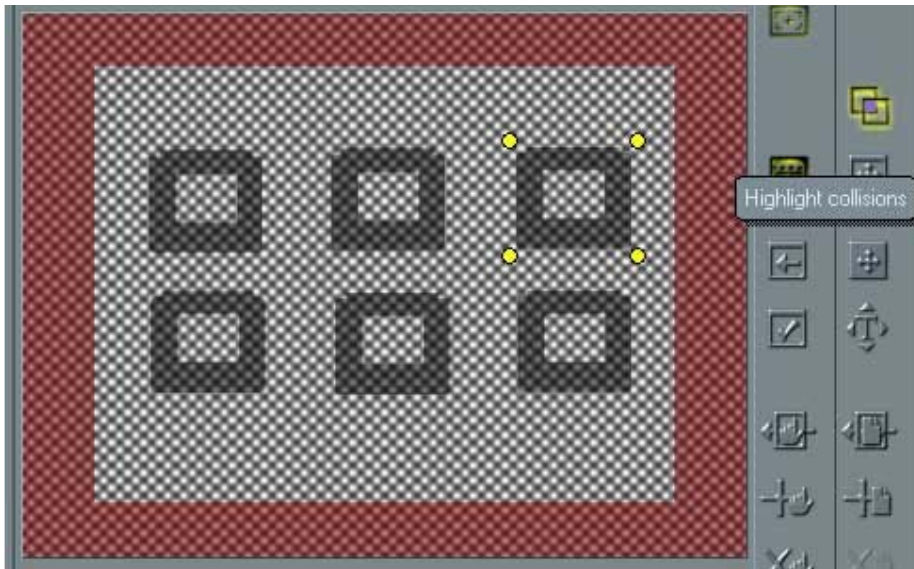


There is a DVD menu editor built into Edition 5 – based on the titling program Title Deko. It allows you to add text and premade buttons in a variety of styles and has options for aligning buttons and distributing them evenly in a given space. You can also bring in your own images to use as buttons and define them as simple shapes of thumbnail buttons. You can also define your button highlights here by simply clicking a box that says active and choosing a colour. Much, much easier than the old way with impression of making complex Photoshop images with different layers and a Pinnacle colour palette in the background.... Although highlights can be adjust inside Edition's DVD editor this is easier. One curiosity is that like the titler if the computer crashes during making a menu then it does not get saved by Edition's autosave function. This is because they are effectively separate programs that have been launched from within Edition.

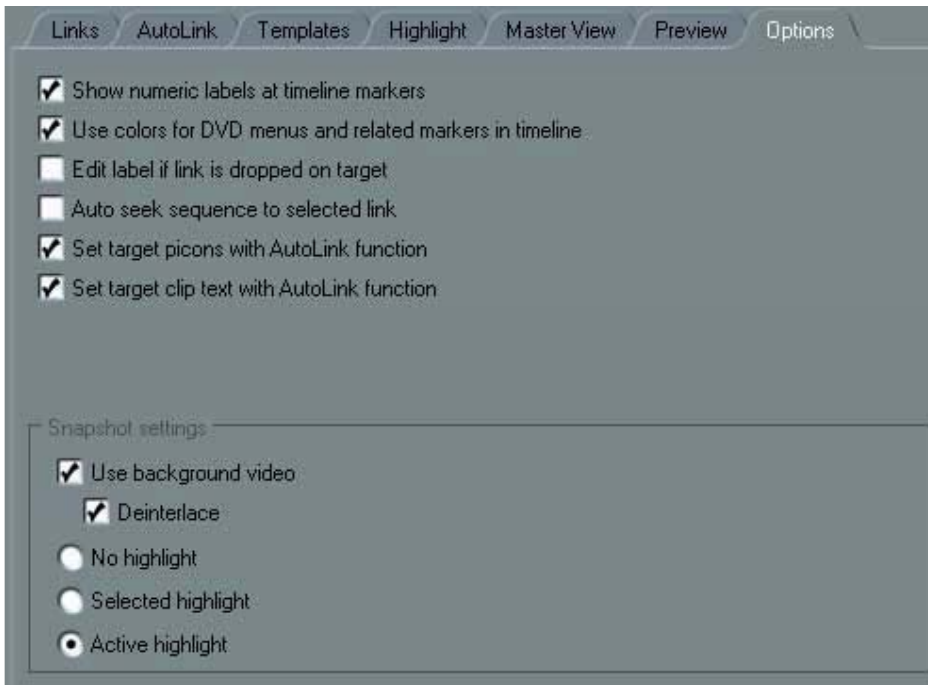
It is still possible to make menus in Photoshop with different layers as you would with Impression, although there really is not much need for it!



The DVD creator has several other good options. This navigation view is probably my favourite – This view allows you to define the starting button and then what happens when you press the left, right, up or down button on your DVD remote. To change the behaviour just go to the right hand side of the clip and click on it and right hand arrow will appear. To change the button this goes to just drag the arrow to your chosen button. In other DVD writing programs, like DVD Workshop, the computer decides exactly which button is the default (normally the first one you add but sometimes not!) and what happens when you press the navigation button.



Edition also has some nice tools that warn of VOB problems (the result of having two chapter points too close together) and a special view to show you highlight collisions (where you buttons overlap thereby causing a menu problem) and your title safe area (to make sure all your buttons appear on screen).



This options screen allows you to set different editing settings. Notice the make snapshot button - this enables you to take a picture of a menu to be used as an icon in another menu, something I have wanted to do on many occasions!



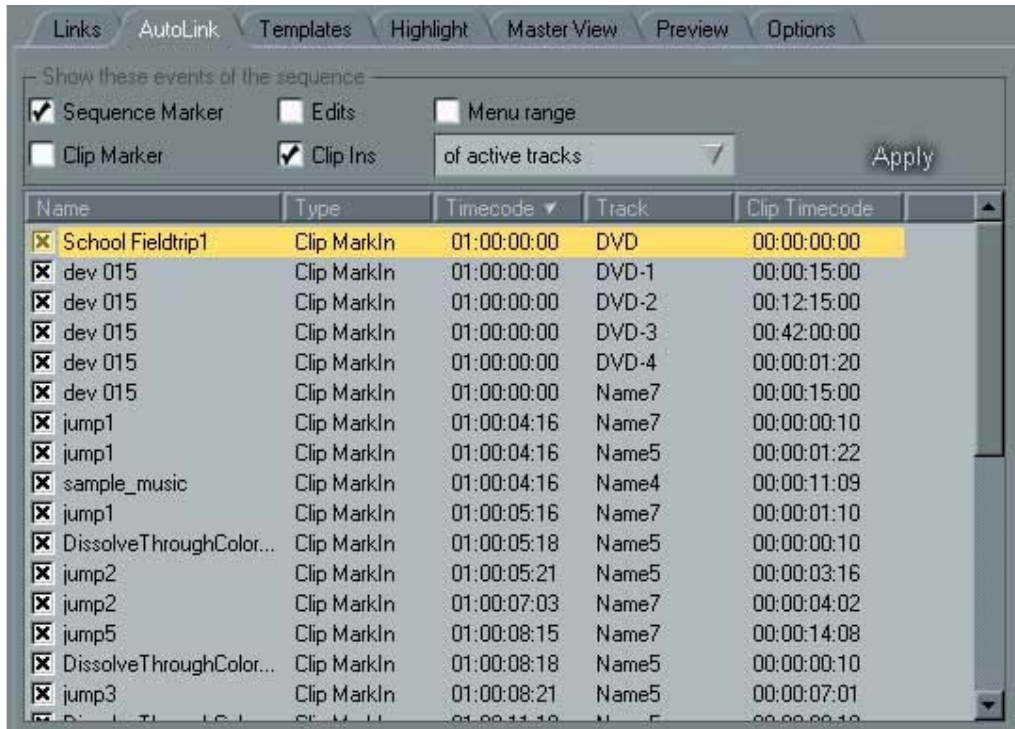
Video menus are normally hassle to create – either you create a background first and then create highlights for it, or, as with DVD Workshop, you drag on buttons and then place clips inside them. This works fine in DVD Workshop although the rendering times of these menus is quite horrendous!

Inside Edition you have an editing and compositing program at your disposal – Edition itself! SO you just open up a clip, choose the video you want as a thumbnail and drag it onto the button. As you can see here I have several thumbnail buttons and all the video used as thumbnails has gone onto the timeline under the menu, complete with a realtime 2D effect to make them fit the frame, all of which can be adjusted and other effects added.



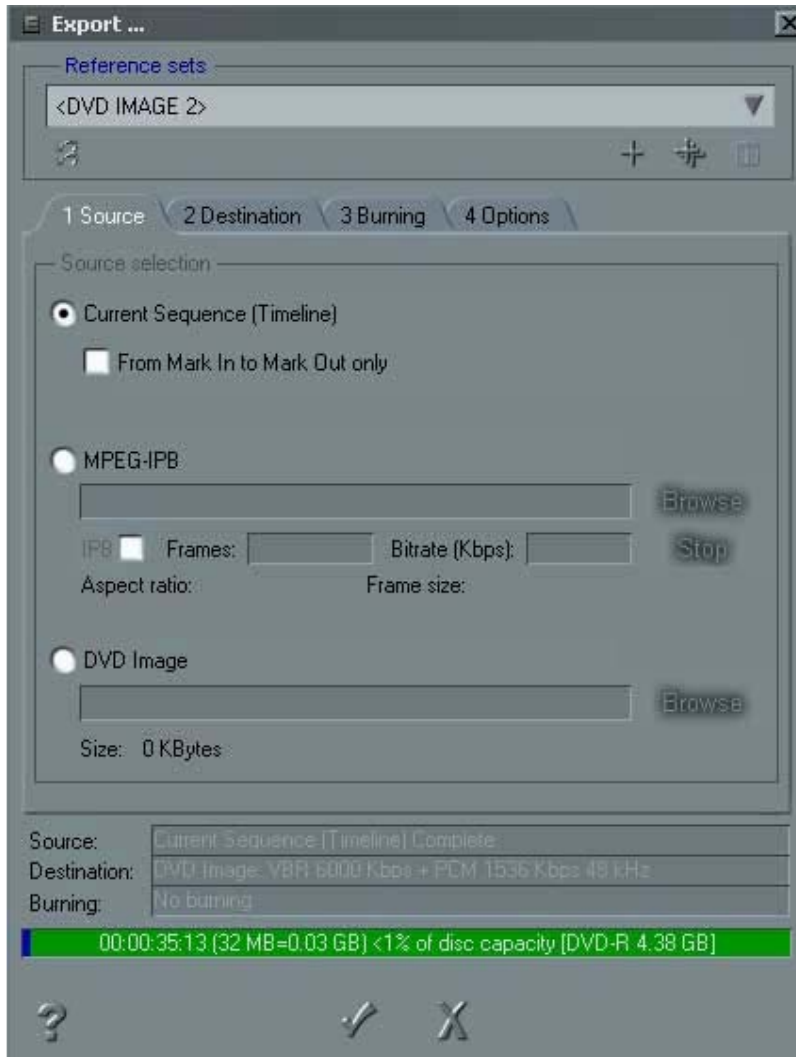
Once you are happy with your DVD you can preview the results. If you have the Edition Pro board added this preview will be direct to the TV – even if you have a complex moving background it will preview, and depending on how complex it is depend on how accurate the preview is. For a menu with about 5 layers this will probably be in realtime. This gives you a great way to check out the buttons and text to make sure everything is readable.

Once you are happy with the way your DVD works then you write it. Edition's export to DVD option can create files on the hard drive as well as write direct to many DVD writers. Also included are options to do VCD and SVCDs as well as DVDs – VCD were not an option with version 4.



One thing we did not mention – there is a wizard for making DVDs including items like this **auto link box** – also accessible without the wizard. Personally I am not a fan of wizards and use this very rarely but it does help the process.

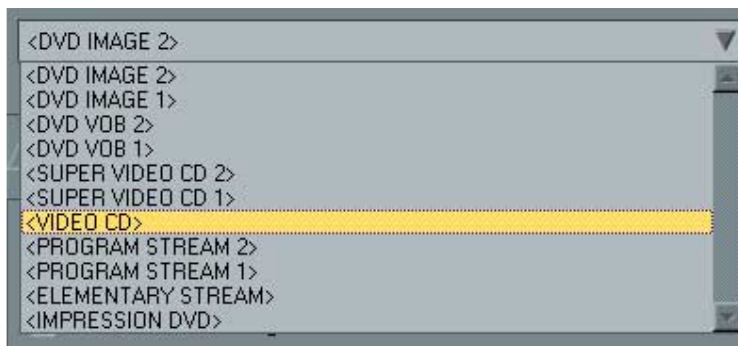
The manual is also worth a mention at this point as it is fairly good. We will, of course, be producing an update to our successful Edition tutorial to cover making DVDs with version 5.



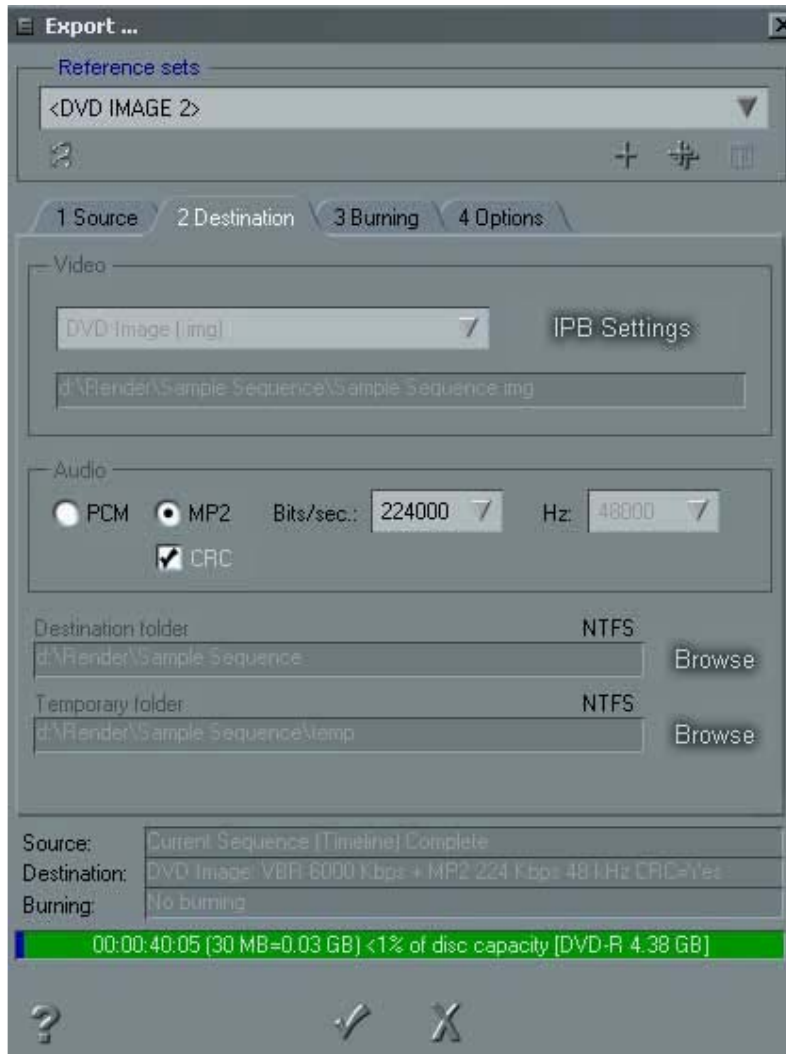
The export the DVD options...

The first specifies whether you are building your DVD from this sequence, and existing file or image...

Notice the handy readout at the bottom of the screen showing how much of your DVD is used.

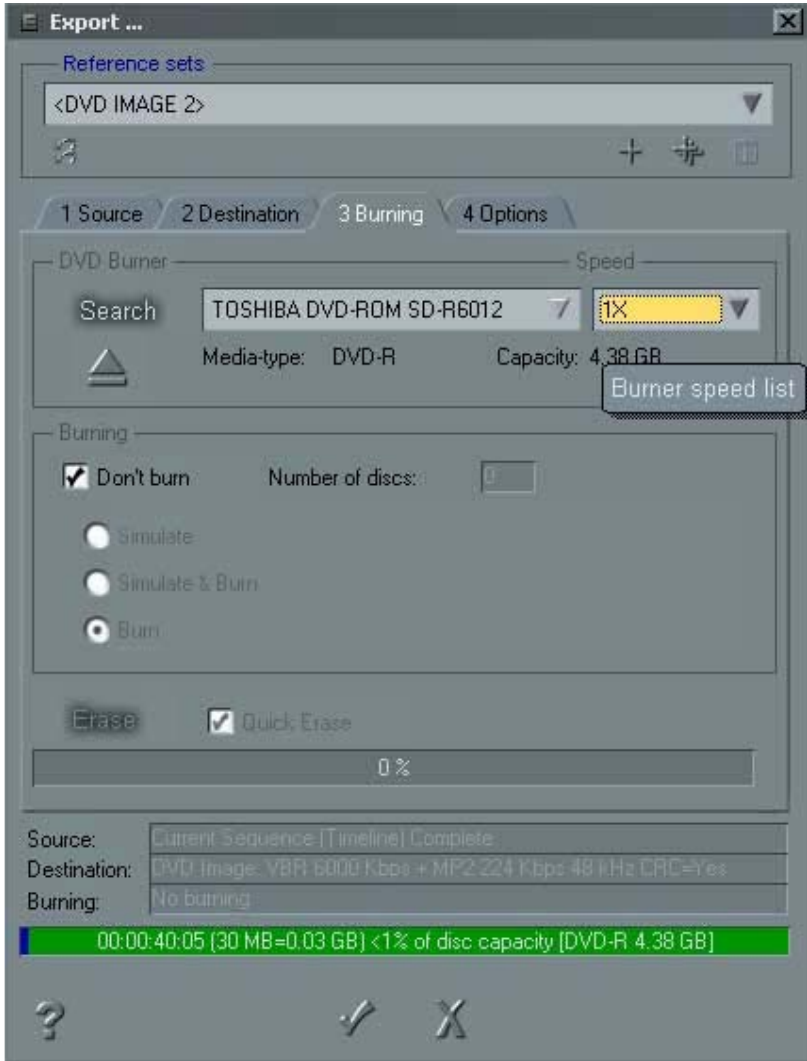


Amongst the reference sets we have several options.

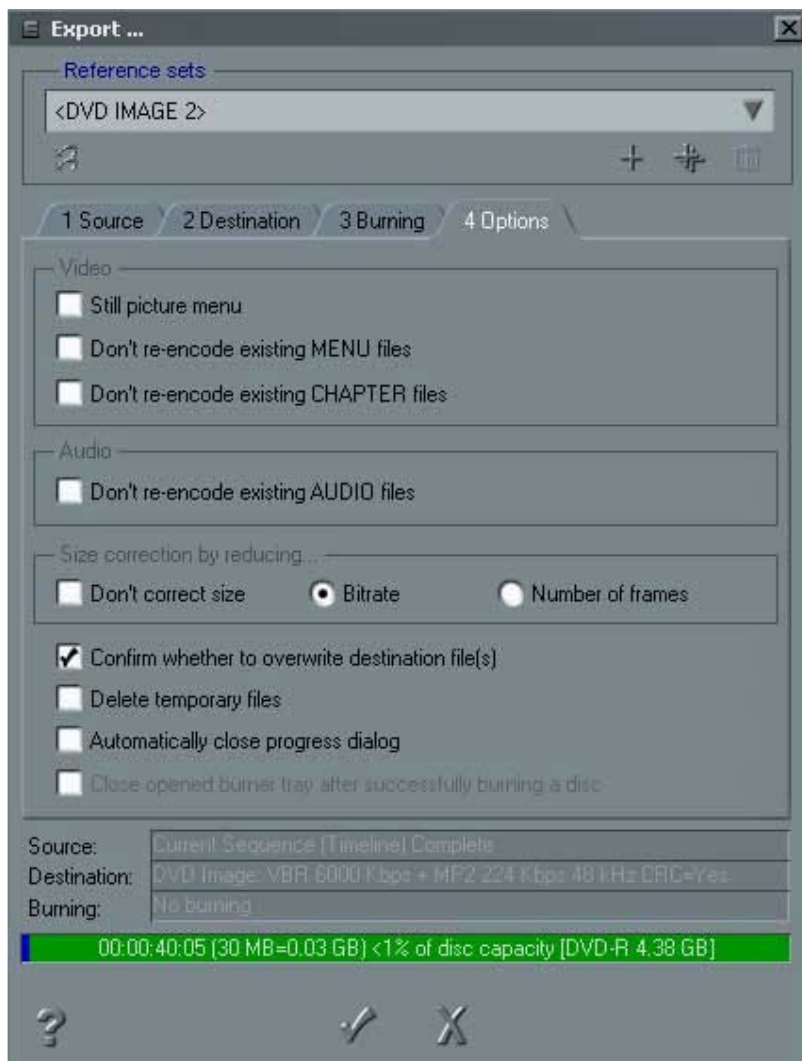


The second screen allows you to choose the type of stream. Program stream will be used for making CDs with MPEG to be played in other computers. SVCDs obviously make SVCDs (with 35 minutes only on each disk - this is not variable), VOB files for DVD authoring programs that require them, and image file so that you can latter write the disk.

For users of version 4 notice the CRC check box under MPEG audio. A silly omission fro version 4 that meant everytime you loaded footage from Edition 4 into Pinnacle's own DVD writing program it would complain it was not pukker. A small fix but a nice one.



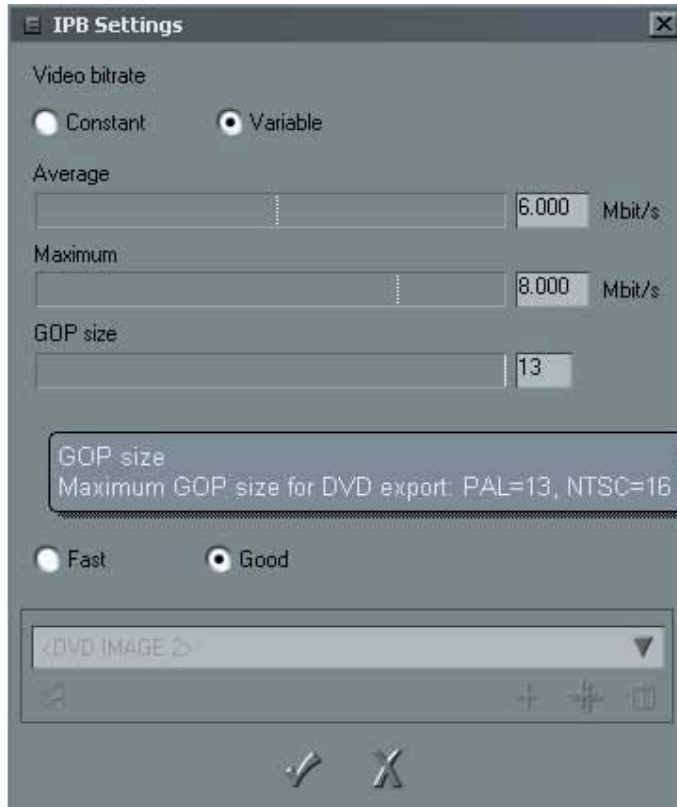
The third screen allows you to choose your CD writer/DVD writer and burn the disk.



The new 4th screen gives you various writing options - notice the option not to re-encode existing chapter files - very useful if once you have made a disc you suddenly notice a small mistake. You don't really want to have to wait for it to encode the whole thing again.

The most interesting option here is size correction - Edition will automatically adjust the bitrate of your DVD so that the whole sequence will fit on the disc. With most programs you have to specify the bit rate yourself and after your length encoding process may find that the video does not fit on your DVD - meaning you to do another lengthy encoding process!

MPEG OPTIONS



There are only a few encoding options. With version 5 Edition can now make constant or variable bit rate streams, and so a new option of maximum bite rate as well as average has been added. You can adjust the bitrate between 8mbs and 2Mbs and you can also adjust the GOP structure. The fast and good settings as their names imply change the speed of encoding. Fast is actually quite good quality, although good is obviously better.

The encoding is not the fastest in the world but the quality is pretty good and quite an improvement over version 4. Obviously the faster computer the better – we will running some tests on various machines over the next few weeks and will post the differences here,

On a 1.8hz Pentium approx **2hrs 25 minutes** took around **10 hours** to encode, which is about 4 or 5 to one –not as fast as using dedicated hardware like the Storm or the RT.X100, or using software such as Premiere’s encoder – however the quality is better and probably only bested by Canopus excellent ProCoder.

Of course, you still have the option to create just an MPEG stream, which you can use, is another DVD writing program if you prefer!

Of course, there are some disadvantages to the process:

1. You have to use Edition’s MPEG encoder and not a 3rd parties. You can load up MPEG footage into edition and use it in a DVD but it is lot harder to set up chapter points and Edition may insist of converting the MPEG footage to DV then back again before making the disc.
2. Edition 5 does not do different audio tracks, video tracks of subtitles – for this you need ReelDVD or Pinnacle’s Impression Pro
3. The process is more complex than using a simple DVD writing program like Ulead’s DVD Workshop
4. You can’t add chapter points to a movie without linking them to a menu. Sometimes I will write a disc with some main chapters but with other chapter points every 5 minutes just to aid skipping quickly through the DVD. To do this with version
5. You have to add a menu for all chapter points.



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