

Managing Stereoscopic Content For 3D-TV Viewing PART 3

Introduction

In Part 2, we explored devices that provide a means of presenting AV shows on our 3D-TV. We identified the need to produce our AV shows in video format by way of video editing software (editor) that has a 3D capability. We also identified that a 3D Blu-ray player (player) is the preferred device for delivering our AV shows to our 3D-TV. It follows then that our PC needs to have the capability of writing to media that will be compatible with our player, be it an optical disc or a plug-in storage device (USB or SD). Ideally, we need to have a Blu-ray writer available in our computer or as an external device. Blu-ray disks (BD) are now available for around £1 and so it is advised that we check our shows by writing to a BD-RE disk that cost around £5 but can be used over and over.

In this final part of the article, we will examine the basic procedures to be followed when using the more popular editors. We will take a quick look at a program with which many of us are familiar - Photodex ProShow; this will then be followed by a look at the key settings in perhaps the most popular 3D editor available, Matrox Movie Edit (MME).

You will find that all editors will have similar production stages within the project created; usually four - **import, edit, burning, export**. The names used for these workflow stages will differ from one editor to another. Those stages quoted are for MME, each of which we shall refer to later in this article; first we shall look at producing a show with ProShow.

The ProShow interface differs from any 3D video editor and is not in fact designed to work with 3D. However, if we use the image format described in Part 1, ProShow is the easiest way to produce a 3D show for presentation on a 3D-TV. The fact that we are to produce a show with a 16 x 9 frame containing side-by-side, half width images means that the 3D-TV will recognise it as such in a similar way to recognising a 3D broadcast.

Photodex ProShow (ProShow)

Having opened ProShow, in this case the 'Gold' version, we must first set the 'Show -> Show Settings' as in Fig. 1. The important setting is the 'Aspect Ratio' which must be 16:9 (Widescreen).

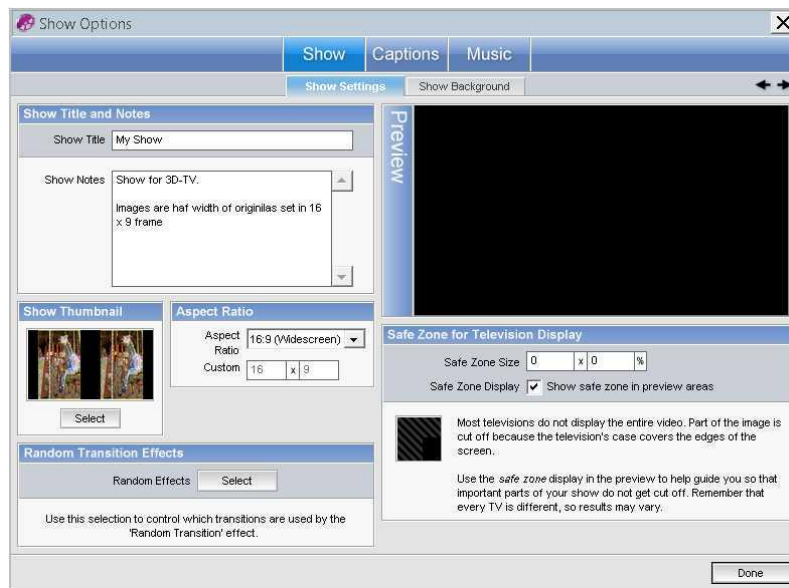


Fig. 1 - Show settings.

This is the time to save our show 'File -> Save as' with a name of our choice 'My Show' for example. The location of this could be that occupying the images, '3D-TV' being the folder we created in Part 1. Now the show is saved, we can navigate to it so that the images can be transferred to the timeline in ProShow. We do this by the 'Folders List' as seen in Fig. 2.

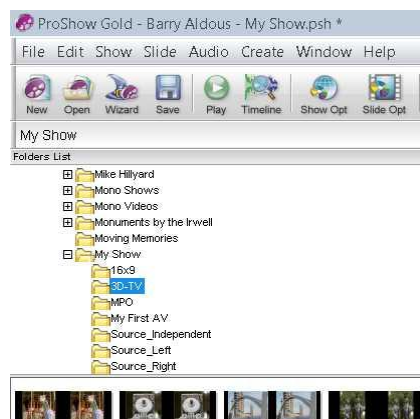


Fig. 2 - Folder List

Clicking on '3D-TV' will reveal our images in the window below - if not, right click on the window and select 'Thumbnails'. We can now drag and drop files from this window to the timeline; each file dropped now will have a green tick indicating that it has been included in the show; The timeline should now look something like Fig 3.



Fig. 3 - Timeline

The transition and slide duration can be adjusted as required. Captions can be included, but we shall need to have matching left and right ones set to 'Caption -> Caption settings -> Position' enter 25 and 75 respectively see Fig. 4. Note that a narrow font is selected.

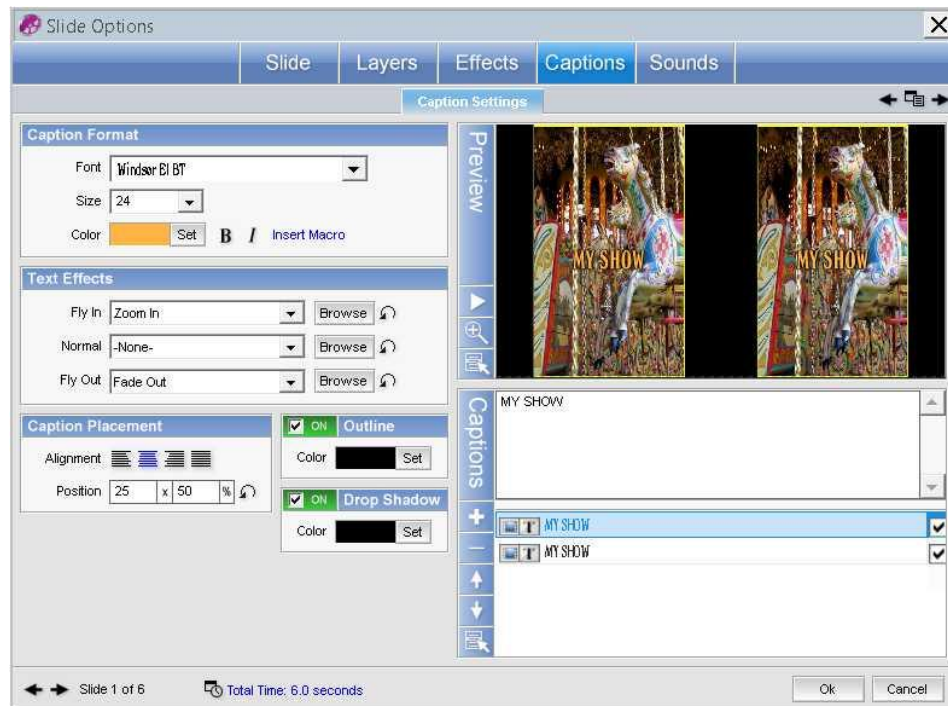


Fig. 4 - Caption settings

It is beyond the scope of this article to explain in detail, each stage in detail, but we can add sound to the show in the form of narration and background music. Doing so is no different for 2D or 3D shows and therefore the instructions for ProShow will serve our purposes well.

Have completed our show we can now 'Create Output -> Video file' with the settings shown in Fig. 5. 'Type' and 'Quality' are the only fields requiring a selection, the rest of the fields will remain set at their default settings. We now click on 'Create' to save the file in the same folder as the other show objects, with a name of our choice.



Fig. 5 - Create Output - (to computer)

The file that we have saved, 'My Show.mpg' or something similar, can now be copied to a flash drive that can be inserted into the USB connection of our player for play back; there is no guarantee that plugging the flash drive into the TV will work.

We also have the option of copying our show to a BD from within ProShow by 'Create Output -> Blu-ray' then -> 'Options'. The dialogue we are presented with will appear as seen in Fig. 5.

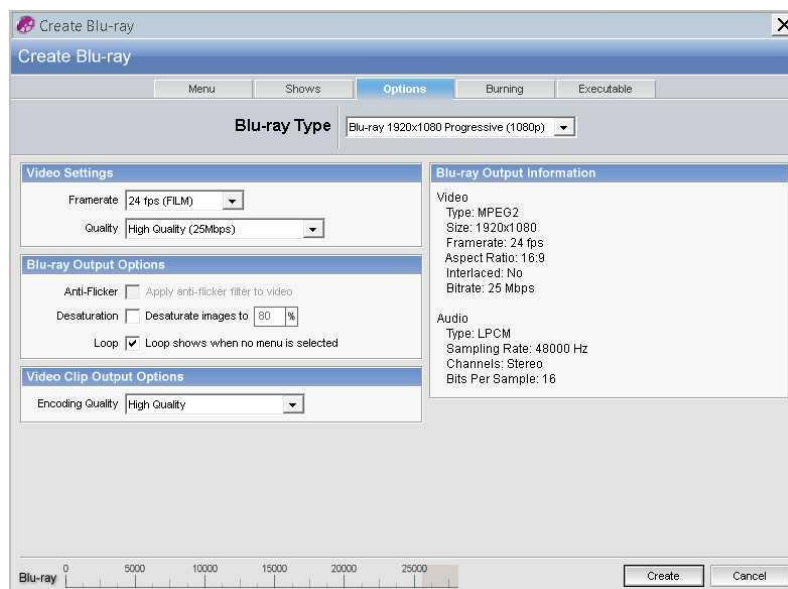


Fig. 5 - Create Output (to optical disk)

The file that we have saved 'My Show.mpg' will be written to the BD with a file structure recognised by our player. With most players this file structure will enable the disk to play on insertion. It is advisable to check our show on a BD-RE before committing it to a BD-R.

ProShow completes the task of writing optical disks by including an EXE file of the show on the BD; this can of course be copied back to our computer for viewing if so required,

Magix Movie Edit (Magix)

We shall now try our hand at putting together a show with Magix Movie Edit, in this case the MX version. Unlike ProShow, we now have a choice of which file format we use; we can use exactly the same files as used in ProShow - 16 x 9 aspect ratio with half width images, 32 x 9 aspect ratio with full width images or matched individual left and right images of any aspect ratio. In order for this to work, we will need to tell Magix what we have imported.

First things first! Having opened Magix we will first navigate to the folder that holds our files, in this case 3D-TV, see Fig. 6 showing a full screen view of our work space with the Media Pool 'Import' tab selected.



Fig. 6 - Magix work space.

Now we can now drag and drop our selected images to the timeline, just a few at the moment. We now highlight the group of the images so that we can tell Magix in what format they exist. Fig. 7 shows how the timeline looks at this stage.

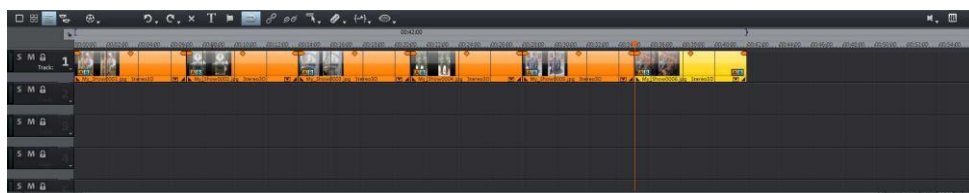


Fig. 7 - Timeline with highlighted files

We can now tell Magix what the imported file format is, in this case click on the 'Effects' tab at the top of the media pool, then 'Stereo3D -> Properties -> Side-by-side -> [left image to the left, half width] as shown in Fig. 8. Note that this process is not required if the images imported are MPO format.

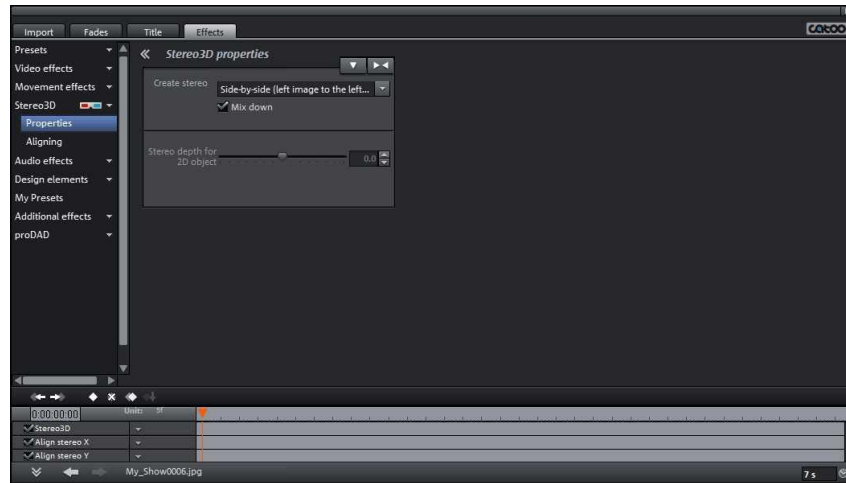


Fig. 8 - Effects - Stereo3D dialog (side-by-side images).

If we choose to import individual left and right full width images, they should be dropped onto two separate tracks of the timeline. Then highlighted followed by 'Effects' tab at the top of the media pool, then 'Stereo3D -> Properties -> Side-by-side -> [Stereo3d pair - left image first]. Fig. 9a and 9b shows how the timeline will look before and after using these settings.



Fig. 9a - Effects - Stereo3D dialog (stereo pair - before merging).

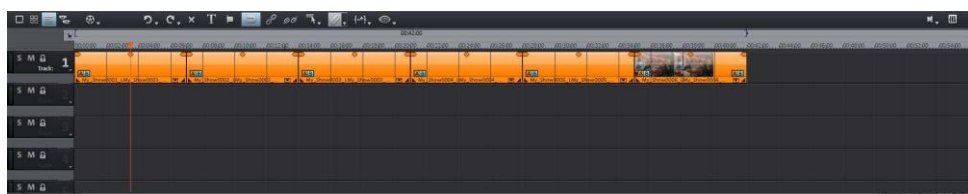


Fig. 9a - Effects - Stereo3D dialog (stereo pair - after merging).

At this point we should save our project - 'File -> Save project as...' to the same folder as the selected files.

Before commencing our editing, we can set the Display Mode we would like to use. Click on the red/cyan symbol at top left and make your choice. If our monitor is a 3D type, then we should select an 'Interlaced' option otherwise 'Anaglyph' will be useful - see Fig.10.



Fig. 10 - Display Mode (Anaglyph).

From this all further editing processes will be common to all image formats. The way in which we proceed will depend on our taste. There are comprehensive instructions built into the program and there are example training videos on You Tube. Being a 3D editing program, we can assume that whatever we do with 'Fades', 'Title' and 'Effects', they will appear in 3D.

Once we have completed our editing, we can save our show as a video in the same folder as the other show objects, with a name of our choice, To do this, we use the 'Burning' tag which takes us to the 'Preview' screen, see Fig. 11. From here we can first simulate the actions of our player's remote by clicking on the buttons to the left of the screen. This screen also provides us with the facility to edit the menu for our show, something we may choose to do in the future.

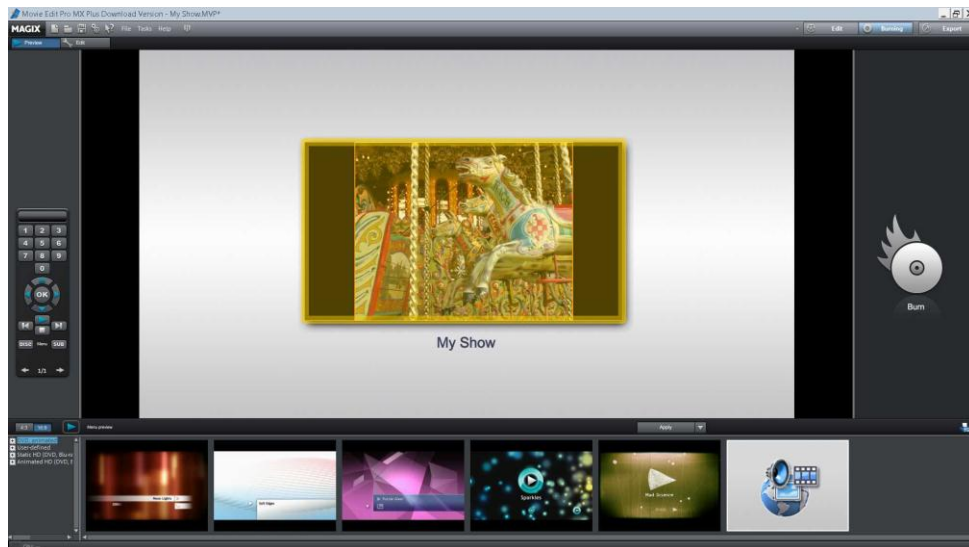


Fig. 11 - Burning - Preview screen

By clicking on the 'Burn' button, we are presented with a selection of disc options. We will be choosing either Blu-ray or AVCHD; the list below each button provides an indication of what to expect, see Fig. 12.

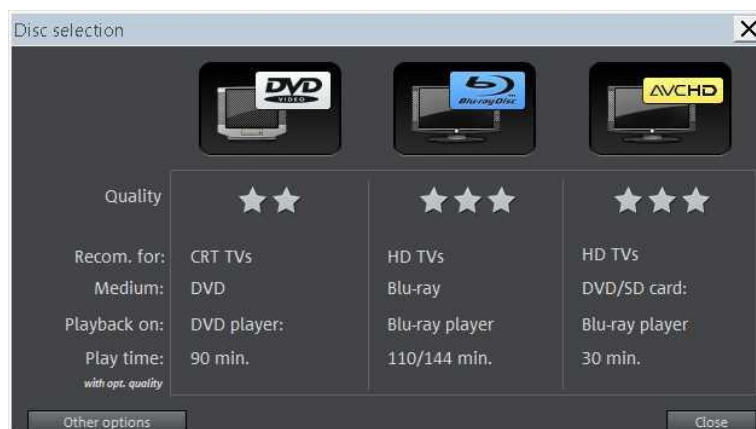


Fig. 12 - Burning - Preview screen

If we have a short show, we will choose AVCHD and insert a writeable DVD into our computers optical drive. Fig. 13a shows us the AVCHD dialogue and we shall check the encoder settings to ensure that our required 3D format is set. Click on 'Encoder settings...' and then 'Preset -> Side-by-side [left picture first]' and leave the remaining settings at default, see Fig. 13b. We can now burn our disc, during which time a progress window will appear. We can also see in Fig. 13a, that we have the option to 'Encode in directory' which will create a video file on our computer hard drive that can be copied onto a Flash drive.

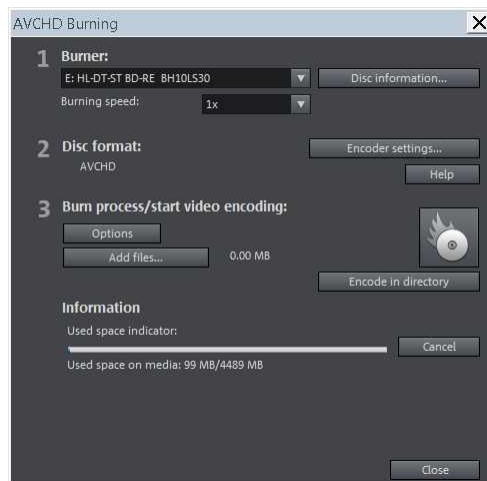


Fig. 13a - AVCHD Burning

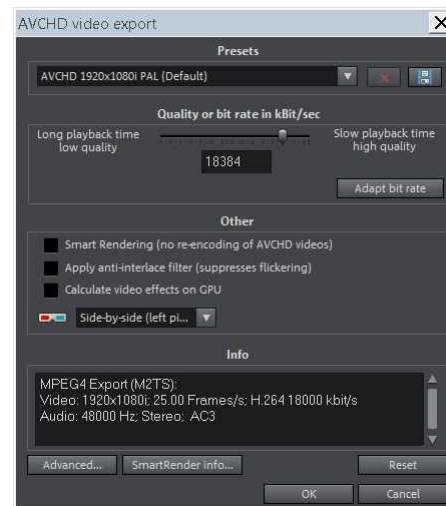


Fig 13b - Burning Presets

The process we follow for creating a BD is similar to that for AVCHD and must be used for larger shows or compilations of shows. Fig 14a and 14b shows us the preferred settings.

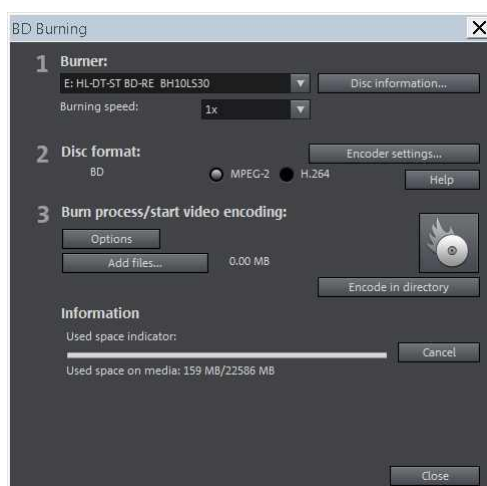


Fig. 14a - BD Burning

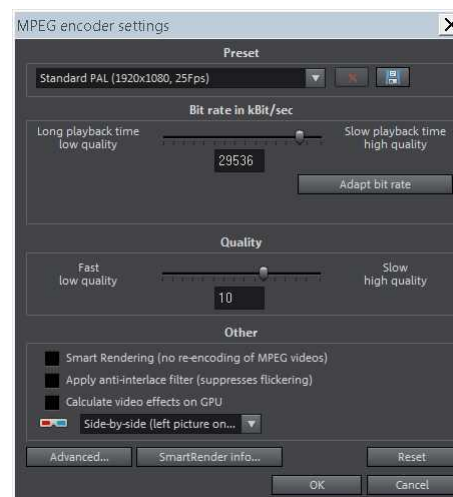


Fig 14b - Burning Presets

We can see that, as with AVCHD, we also have the opportunity to 'Encode in directory' which will create a video file on our computer hard drive. This file be saved to an existing or new folder in the form of an ISO that can be used to produce a BD at any time.

Summary

In this article, we have explored the methods available to us for producing and managing images for display on our 3D-TV. We have only touched the surface, but the results we can achieve with this simple guide will hopefully encourage us to venture further, developing our creative skills to enable us to produce shows with richer content.

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