

PROSHOW STEREO WORKFLOW METHODS

By Barry Aldous – September 2010

Overview

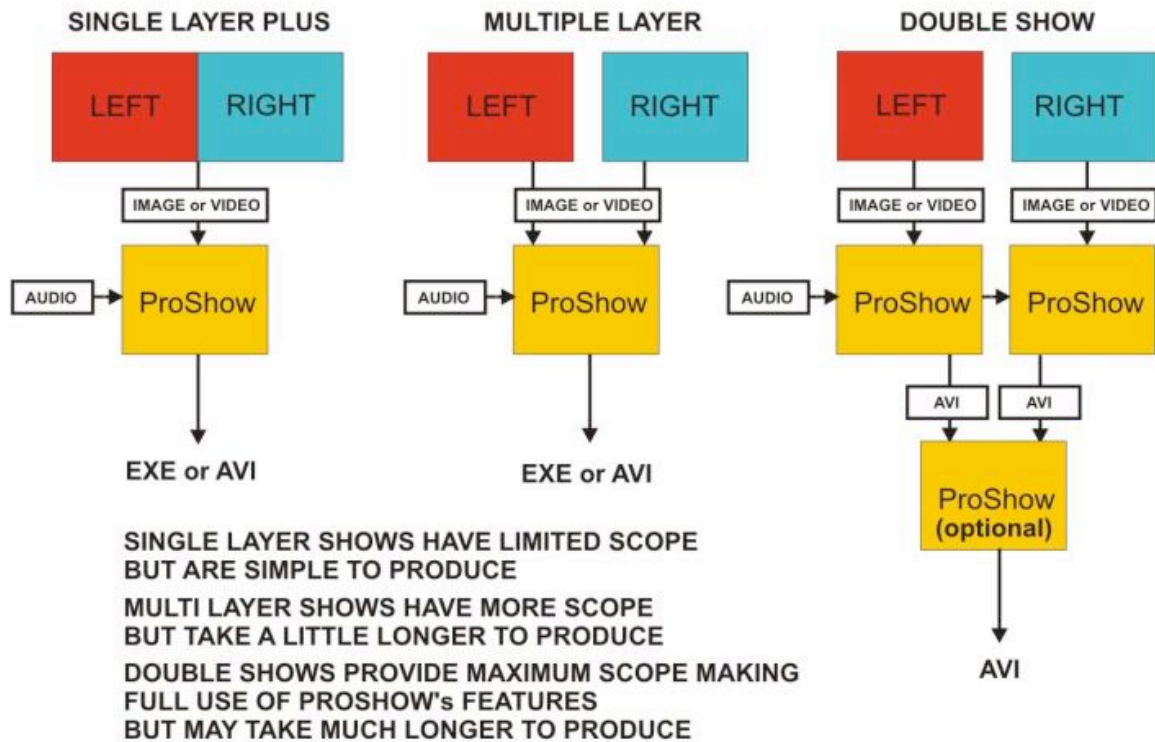
ProShow (PS) is a program by Photodex Inc. designed for the production of Audio Visual (AV) presentations (Shows). The visual content is displayed as a 'Slide' in a 'Timeline'. Slides may be simply a single images, photo or video, added as a 'Layer' to which may be added 'Motion', 'Effects', 'Captions' and 'Sounds'. The fusion of photos and video layers is possible within slides and the timing of each slide may be controlled individually. Various 'Transition' effects may be used between the slides in the timeline. The audio 'Sounds' content may be a single or multiple files compiled as a single 'Soundtrack'. Additionally, individual sounds can be tagged to an individual 'Slide'. Any music or sound effect required will need to be gathered from external sound sources, although a 'Voice-Over' can be recorded and added to a 'Slide' from within the program. Sound settings, such as volume, fade-in and fade- out can be adjusted within PS as can the interaction between slide sounds and the main soundtrack of the show.

PS can 'Create' shows in various presentation file formats, the most pertinent being a self-contained PC executable (EXE) file having its own integral player, or a video (AVI) file for use with several popular player options, Stereoscopic Player being the most useful.

Fortunately, although not specified by Photodex the publisher of PS, the program is capable of producing very fine stereoscopic shows. In fact, there are three workflow methods that we may consider when producing an AV show with PS; more on this as we progress.

To make the most of the stereoscopic possibilities with PS, it is wise to observe some fundamental rules if re-working our shows is to be avoided. These will now be discussed in brief before moving onto the production of AV shows.

PROSHOW STEREOSCOPIC WORKFOLOW METHODS



PREPARING VISUAL CONTENT

Before exploring PS, we will take a quick look at the situation in which we find ourselves without this, or any similar AV product. We all will, or should be, familiar with StereroPhoto Maker (SPM) and will no doubt have produced stereoscopic images with this wonderful program. More often than not, these will have been saved as side by side stereo pairs for parallel, cross-eyed. If we choose to show our stereo images with digital projection, independent of PS, we will need to save our side-by-side pairs with a combined aspect ratio of 8 x 3 at a resolution to match the capability of more common projectors, usually 1024 x 768 or 1400 x 1050 pixels. A sequence of such images can be shown in several ways including the slideshow feature in SPM.

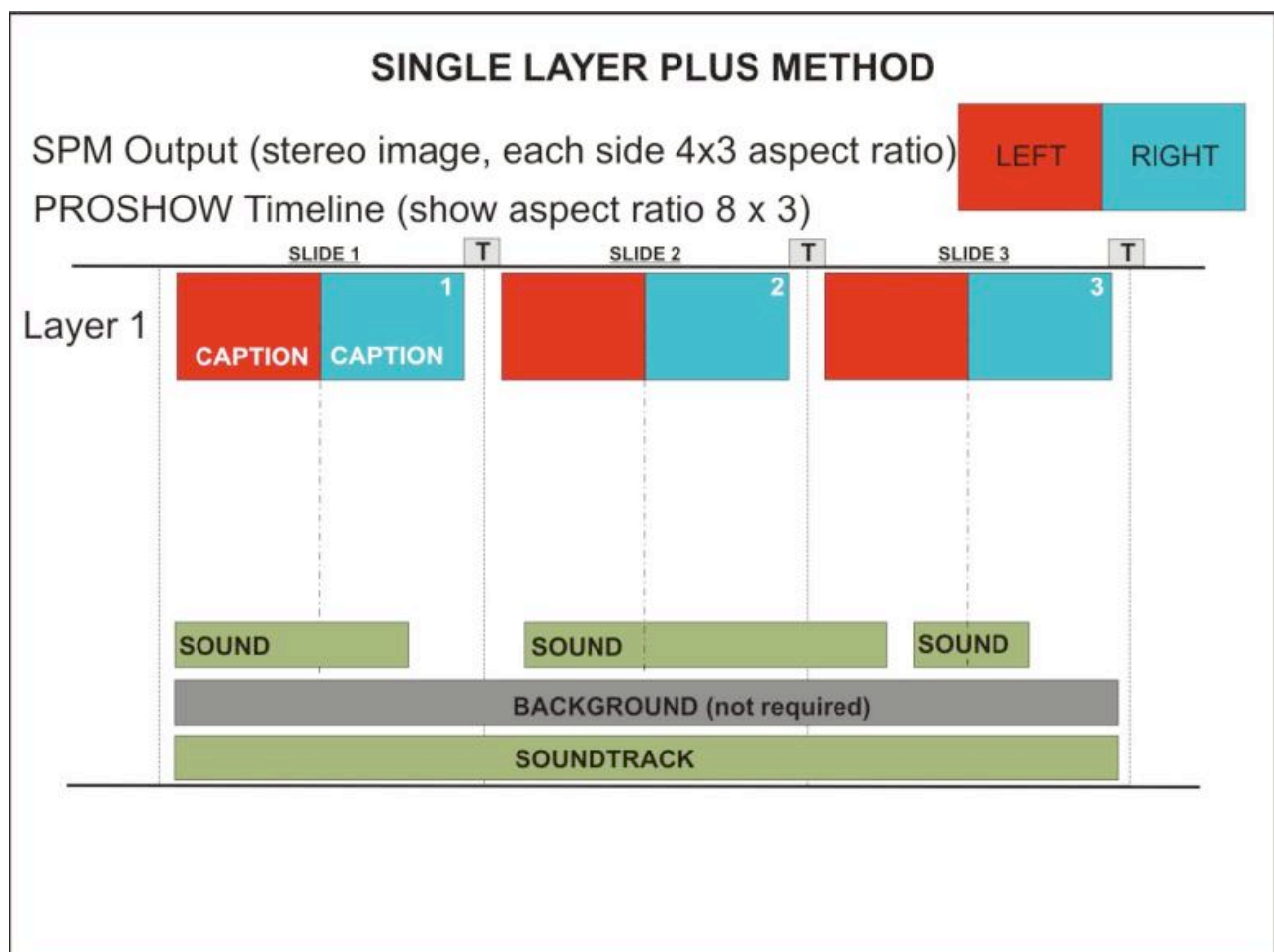
The Stereoscopic Society's current projection system generally requires that each image has a 1400 x 1050 pixel resolution, and we should be aware that if our images require cropping for composition purposes, black borders will need to be introduced to maintain the required 4 x 3 aspect ratio. SPM enables this to be readily achieved during the 'Crop' process. The image 'Resize' size can also be defined during this process. It is

important that when preparing images in this way, they are stored in folder created for this purpose, leaving our originals untouched and re-useable for more advanced shows. The Multiple Layer method that follows allows us to produce shows where the aspect ratio of an image is not critical and a higher resolution is advantageous.

First, we shall take a look at the simplest workflow method for producing AV shows that will at least add some order and continuity to our slide shows.

SINGLE LAYER PLUS – METHOD

We can now move onto our first workflow method for PS, which will be referred to as the Single Layer Plus. This means that the main visual content of each slide is prepared as stereo pair and will be contained in a single layer of that slide.



The PLUS aspect of this method provides us with the option of introducing additional layers for 'picture-in-picture' (PIP) content (see below); we will ignore this option for the time being.

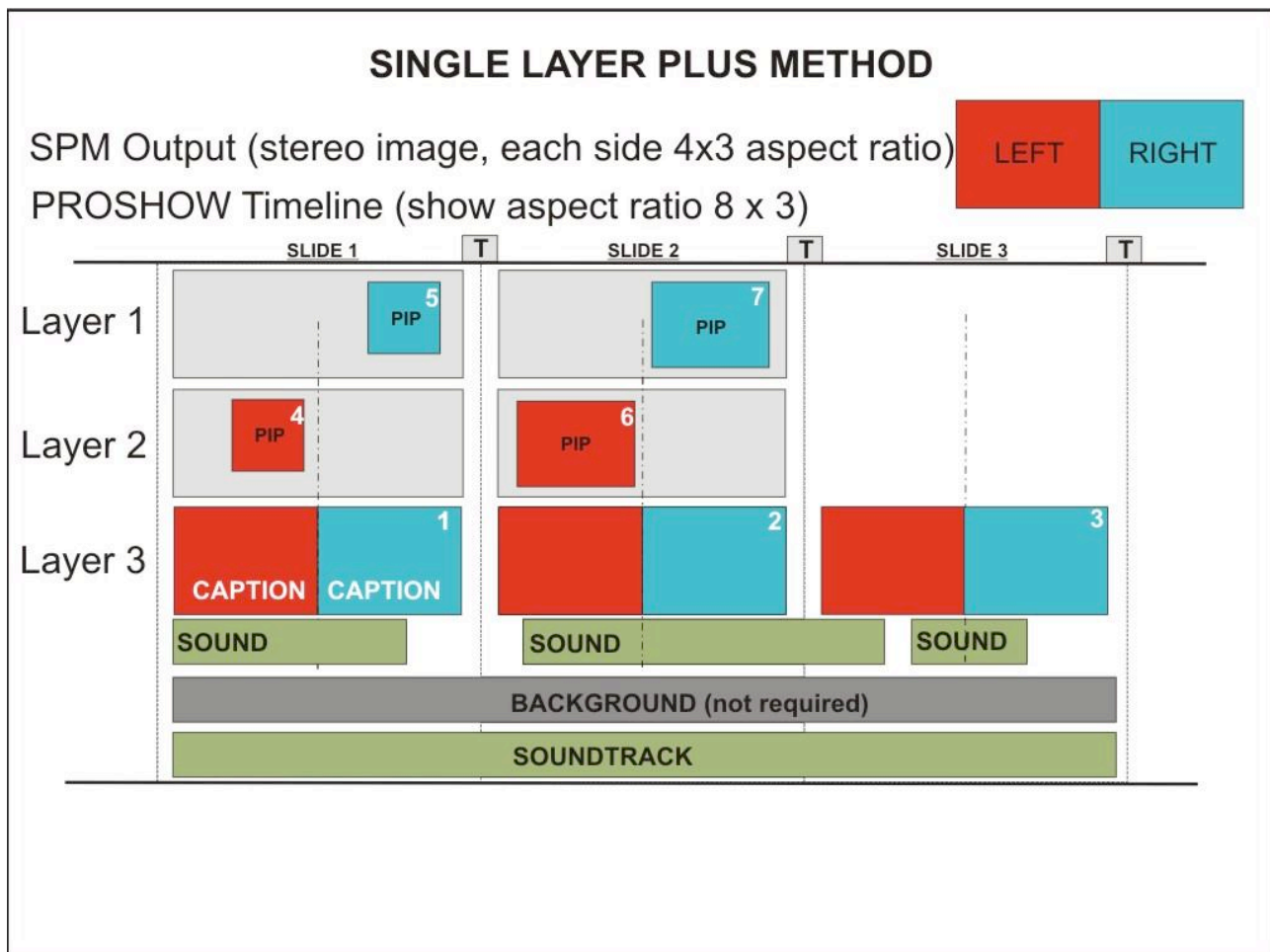
Once PS is opened we will navigate the 'Folder list' to display our content. At this stage we will select the 'New Show' option from the 'File' menu and enter a 'Show title' and its 'Aspect ratio' in the opened 'New Slide Show' dialogue box. We will choose the 'Custom' option for the aspect ratio and enter the values 8 and 3. One further setting we should make is found in 'Show' - 'Show Settings' where we can change the 'Safe Zone' settings to 0 and 0. There are many more optional settings available here which can ignore at this stage.

Having made all the settings required immediately, we can again open the 'File' menu and now 'Save' our empty show with a 'File name' that we will recognise when we wish to re-open our show for further work. It will help if we save the file in the folder that holds our show content.

We can now navigate to our content folder in the PS 'Folders list' and use our mouse to drag-and-drop content to the 'Timeline'. This will create a 'Slide' for each image placed. Double clicking on the slide will open a 'Slide Options' dialogue box that will show the status for the current slide showing the single layer that we have introduced.

For this workflow method, we can now add the rest of our images to the timeline, choose adjust the time for which each slide is displayed, say 8 seconds and adjust the time for each transition, 1 second being sufficient. We can now add 'Captions' to our 'Slides' along with specific 'Sounds', such as a narration; we can also add a background music 'Soundtrack' to the show. The workflow for these actions is similar for all the workflow methods on offer and will be explained in a future article.

The 'PLUS' aspect of this workflow method is to add layers containing PIP images or video. This we shall learn more about as we explore the Multiple Layer method.



We will now use 'Create Output' to make our AV show. In doing so we will select 'Create Executable' and fill in the 'Options' dialogue box with the resolution details of our show. Our key settings that need to be defined are 'Window size' and 'Rendering' for both of which we will enter 2800 by 1050. We should also ensure 'Full Screen' is ticked and that 'No Menu' is selected. We also need to check that 'Include Intro Show' is off along with everything in 'Branding' options. We can now 'Create' our EXE file.

We could alternatively 'Create' a video (AVI) of our show that is less sensitive to the native resolution of the projectors but may be more demanding on the computer used to play the show; more on this later when we look at the Double Show method where an AVI is the only option.

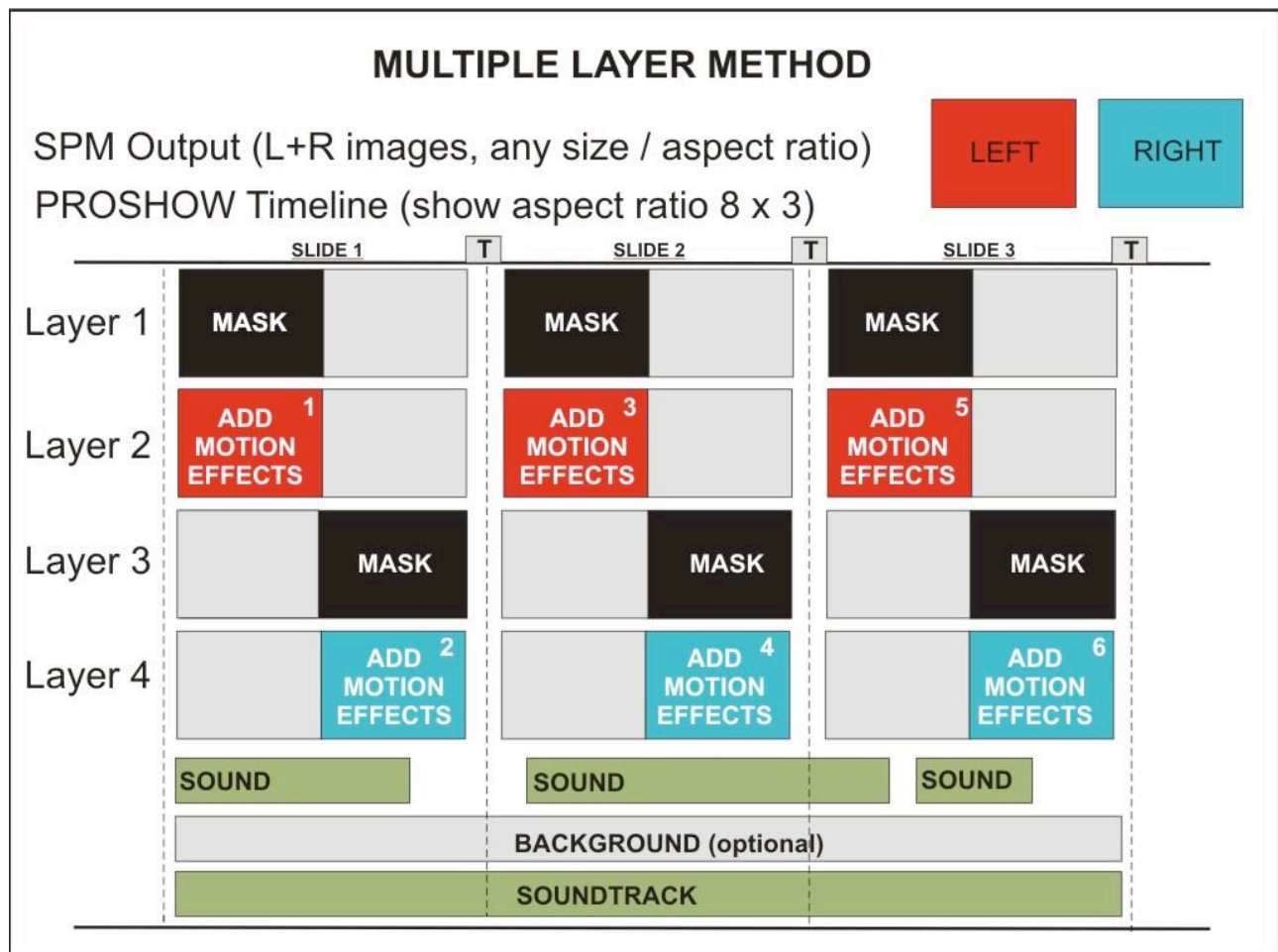
MULTIPLE LAYER – METHOD

Once we are confident with the production of single layer AV shows we may wish to try more sophisticated shows, introducing motion effects to the images, adding multiple images to one slide and so on.

In doing so, we need to prepare our visual content in a different way. Rather than dropping a single side-by-side image into the PS time line, we

will need to add individual left and right images that will appear to be side-by-side. In SPM, it is a simple matter to save individual left and right images which will automatically have the _l and _r extension attached to our chosen desired filename. This means that they can be stored alongside saved pairs with the same name. When we save individual files, we need not 'Resize' them; we can put the higher resolution to good use in our PS production. If we wish to crop our images we will use the 'Free Cropping Option' in SPM ensuring that 'Keep Aspect Ratio' is de-activated as our workflow is not aspect ratio critical.

To add our individual left and right images to a slide we will first need to insert a blank slide into the timeline ('Slide' - 'Insert' - 'Blank Slide'). Double clicking on the blank slide will open the 'Slide Options' dialogue box where we can add (or drag and drop) the required left and right image or video 'Layers' in 'Layer Settings'. The



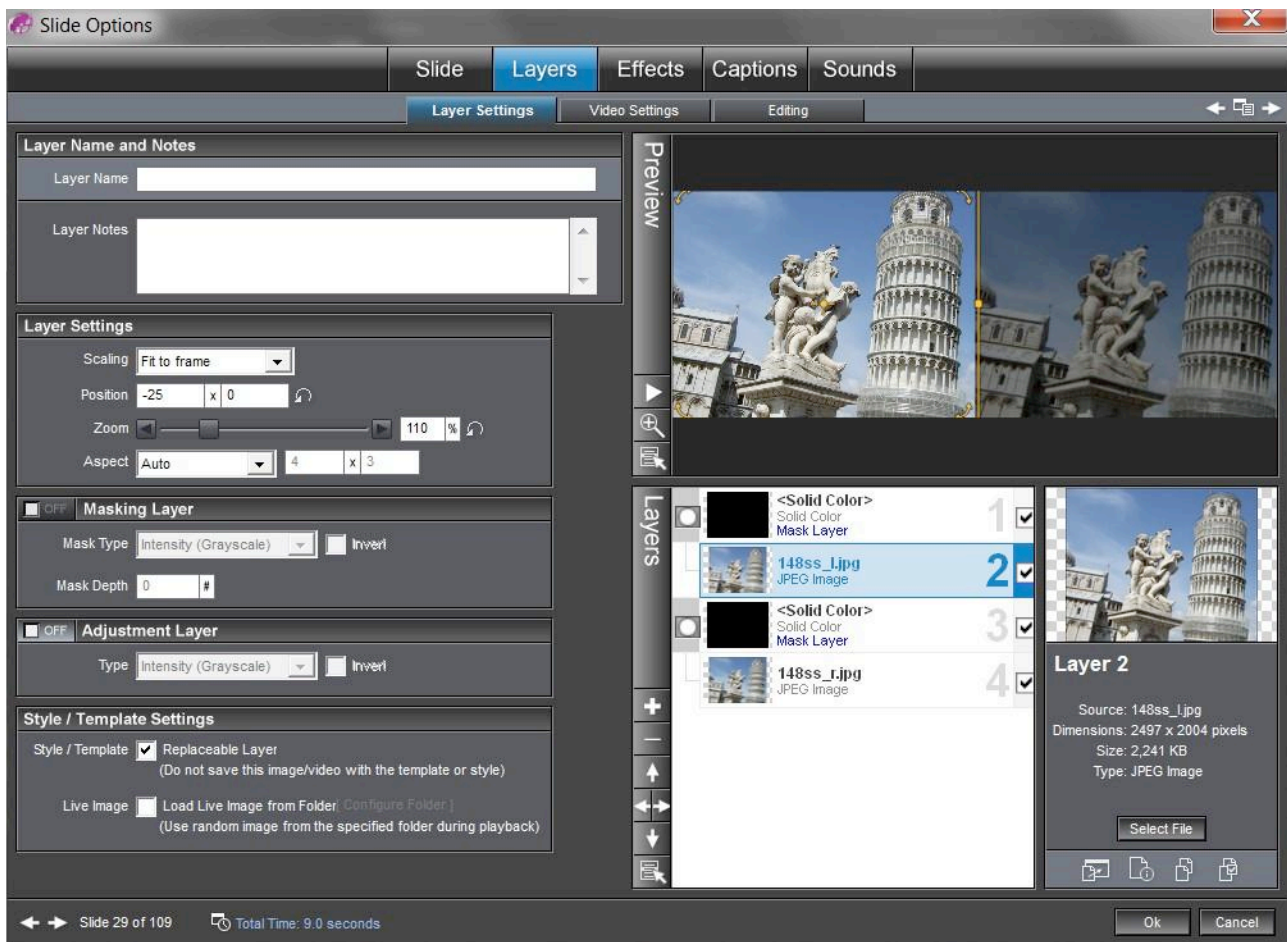
'Position' for our left layer should be set to -25 and 0 the right to 25 and 0, aligning the images as if a stereo pair. We will set the 'Aspect Ratio' to 'Auto' and by setting the 'Scaling' to 'Fit Frame' our images will not extend beyond top and bottom frame boundaries.

If our image has an aspect ratio greater than 4 x 3 then there will be an overlap conflict. This will also occur when adjusting the 'Position' and 'Zoom' to create a close-up. Conflicts of this nature will also occur when 'Pan' and 'Zoom' or 'Motion' are added to our layers. We can overcome these conflicts by introducing a 4 x 3 'Masking Layer' for each image. These layers will exclude the unwanted portion of each image from view. We do this from the current dialogue box opening the layer menu then 'Add Masking Layer' – 'Add Solid Color'. Our new layer will need to be set to 'Color' black. The 'Resolution' value is unimportant as we will use the 'Fit Frame' and 4 x 3 'Aspect Ratio' scaling once more. To work correctly we will need to make sure that when highlighted, the 'Masking Layer' settings are active and within these, the 'Mask Type' is set to 'Alpha Transparency' and the 'Invert' option activated.

We may think that all these settings are too involved, but once established in a single slide it is a simple matter to copy our first slide in the time line, with all its settings (right click on slide – 'Copy'), to make a second, third, fourth ('Paste') and so on. What we do then is drag and drop subsequent images over the original layer in each copied slide, replacing old with new. We can even save a simple show to be used as a starter for future shows.

Now that we have individual left and right images in our timeline, we can try out the simple but effective act of adding slow zoom motion and/or panning to our images. Of course we shall need to adjust the layer settings to suit specific needs, this is quite straightforward once the fundamentals are established.

We can add a slow zoom to our layer by selecting 'Slide Options' then 'Effects', 'Motion Effects'. Several sliders are now available to us but we shall restrict ourselves to 'Zoom X' and 'Zoom Y' which are linked together by default. If we leave the 'Starting Position' at 100 and adjust the 'Ending Position' to 120, this will



work well for most occasions where the slide duration in the time line is set to around 10 seconds. We may need a more drastic zoom value coupled with adjustment to the 'Pan' ending position if we intend to draw our audience's attention to some particular feature within the image. The horizontal pan settings are critical if we are to maintain the correct depth at the focal point of the image – trial and error may be our only solution here.

Now that we have introduced motion to our images, we may wish to consider doing so with our 'Captions'. We may also wish to try introducing more than one image to a slide or fuse a video with a photo, add backgrounds and borders. Much is possible when using this workflow method, except finding the space here to tell how it is all achieved! The diagram below shows some possibilities; note layers '5' and '6' which are borders with a transparent aperture allow images on layers '7' and '8' to appear as a classic stereo card.

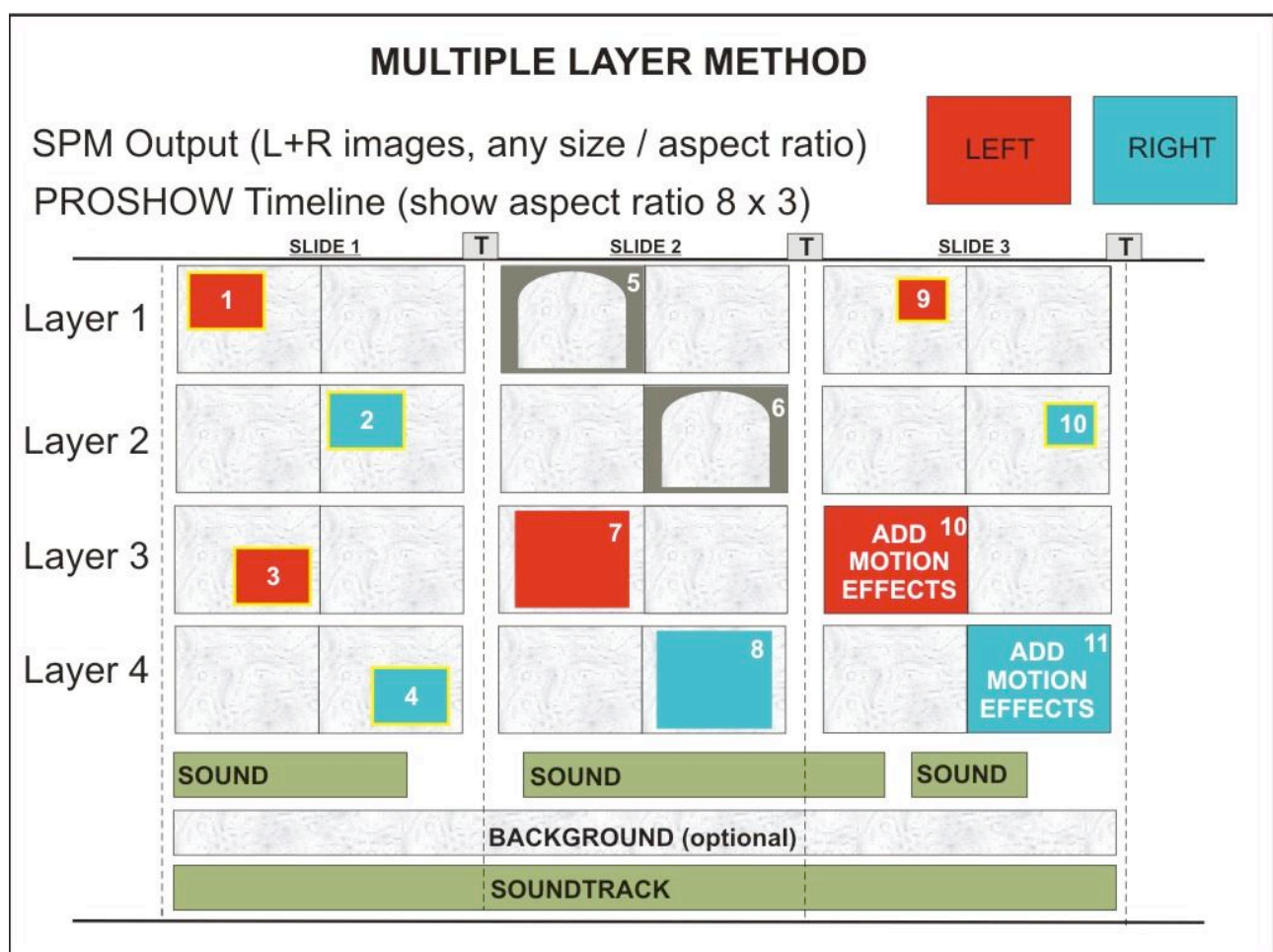
DOUBLE SHOW - METHOD

With PS we have a feature available to us named 'Slide Styles'. These are pre-set theme based settings that can be applied to any slide but are not designed for stereoscopic workflow. These styles are quite complex and

many are unsuitable for our purposes; however, the concept of applying styles to slides can be very useful bearing in mind that we can create our own slide styles from scratch or by modifying the pre-sets.

In order to make full use of slide styles we will need to create a 'Project' that contains two 'Shows', one for the left eye content and the other for the right – referred to from here on as left show and right show. Our PS project will enable us to have the two shows open at one time and we will be able to switch between them at will.

We will create our project ('Project' – 'Create New Project') and find one empty show available – 'Untitled ProShow 1'. We can now add a second show to the project ('Project' – 'New show in project') revealing a second empty show – 'Untitled ProShow 2'. If we now right click on these shows we shall be presented with a choice of actions including 'Switch to Show', 'Rename Show', 'Save Show', 'Show Options', each of which we will visit.



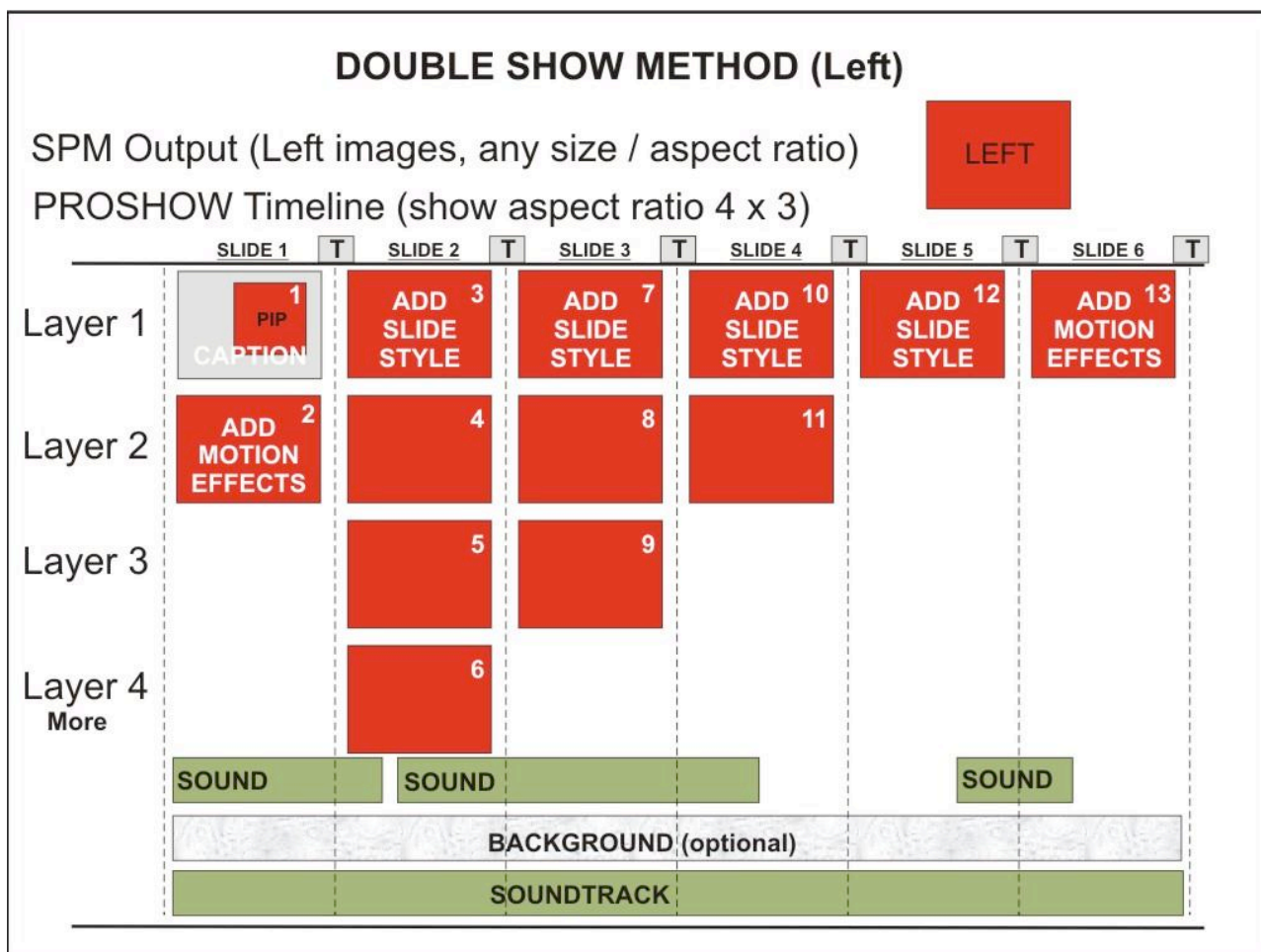
Our workflow requires that we set the 'Aspect Ratio' to 4 x 3 rather than 8 x 3. Our untitled shows can be renamed as we like 'My Title - left' and 'My Title - Right' for example and then saved with a filename of our

choice 'myfilename_l' and 'myfilename_r' for example. We will save the project ('Project' – 'Save Project') with the same name, less the _l and _r extension of course.

Next we will create the left show using all the content and PS features we need, as though it were to be a mono show. This includes the use of 'Slide Styles' mentioned earlier. This feature enables us to add as many images we would like into a single slide and create a mini show for those images within that slide. We can take a look at what's on offer by clicking 'Slide' 'Slide' - 'Slide Styles'. Here we will see our current slide and a list of the styles that can be added to the layers of images in that slide. The thumbnails and preview window will provide us with some impression of what to expect.

We have many styles to work with and we will need to experiment with categorised (themed) groups of images to get the most out of the styles available. To help, we should select those styles that match the 'Category', 'Number of layers' in our slide and the 'Aspect ratio' (4 x 3) that we are using before applying the style to the slide. If we are not happy with the results, then we can change the style accordingly.





Having completed our left show we copy all the completed slides to the duplicate right show as a group (left click on first slide and last slide while pressing 'shift' key – right click – 'Copy' – switch shows and right click on timeline – 'Paste'). Any subsequent changes we make will be to the left show and will only require this copy and paste action for the modified slides. We will not apply this copy and paste to the audio content; this need only be included in the left show.

Now that we have our duplicate show, we will need to drag and drop right hand content across from the 'Folders List' to overlay and replace the corresponding layer in our duplicate.

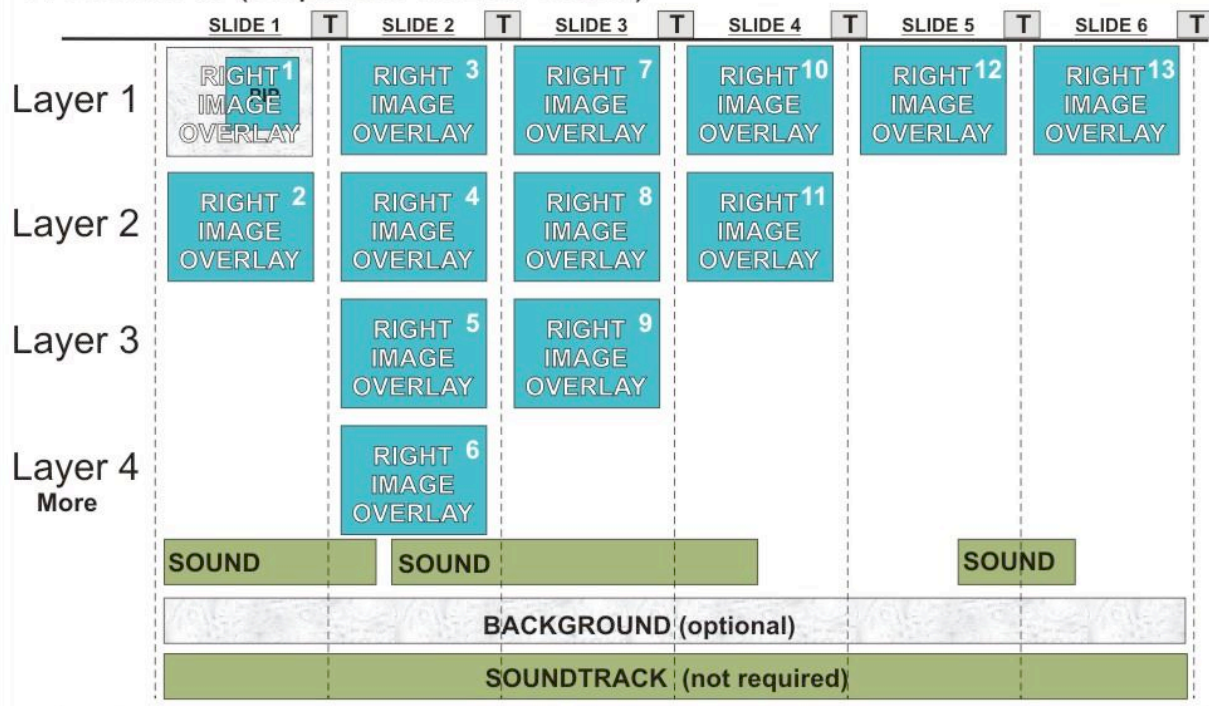
If we chose to add slide styles or even motion to our layers in the left show then we will need to adjust the values somewhat to provide the stereo depth needed. This can be a complicated process with some slide styles and may take us some time to work out. This effort can be worthwhile if you find a favourite style, bearing in mind that the modified style can be saved as a new style. Many of the slide styles available can be converted to left and right hand versions for stereo use – given the time!

DOUBLE SHOW METHOD (Right Show)

SPM Output (Right images, any size / aspect ratio)

RIGHT

PROSHOW (Duplicate of Left Show)



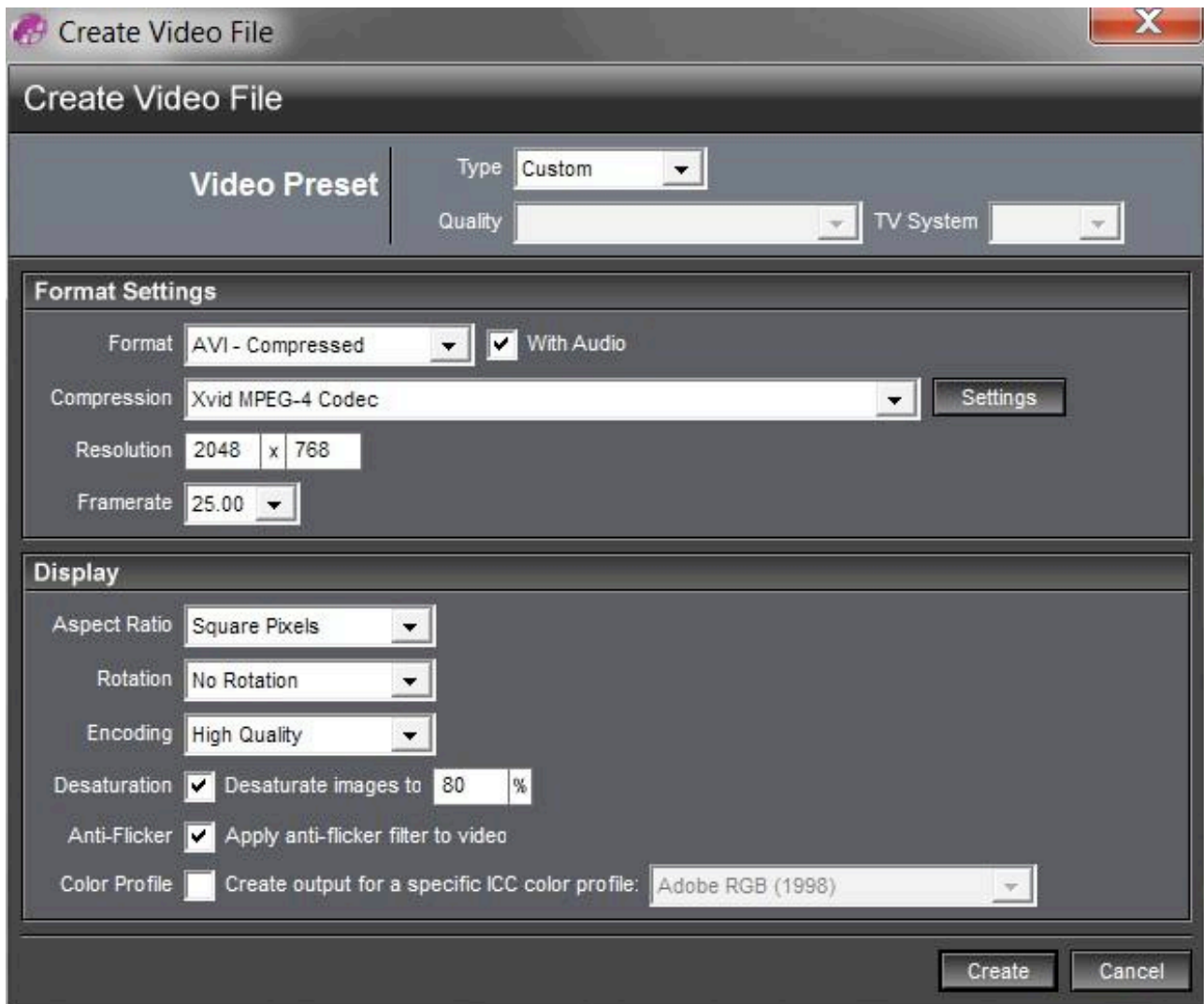
If all is well, we now need to 'Create output' files of the shows as AVI files. We then have the option to combine them into a single AVI file for viewing. Some viewing software available to us, such as Stereoscopic Player, will handle individual left and right AVI files to some advantage, others will need the files to be combined; and we may feel that is a tidier approach.

We can combine the pair of shows may use StereoMovie Maker (SMM), or PS. SMM like SPM is free of charge and has many features that we will be familiar with. It will enable us to create a stereoscopic video in a variety of formats, including anaglyph and interlaced for example.

First things first! When we create video files with PS it is wise to ensure that SMM or the alternative editing software will accept them. We could do no better than to use the Xvid codec for retaining quality while compressing the file size.

In PS we will now select 'Create Output' - 'Video File' which opens a dialogue box where our criteria for the video are set. The settings we will use are shown below with the exception of 'Resolution' which will need to be 1024 x 768 for our current workflow method.

We will now 'Create' our video choosing a location and name for the file filename_l (LEFT AVI) and filename_r (RIGHT AVI). PS can also be used to combine the shows as seen below.

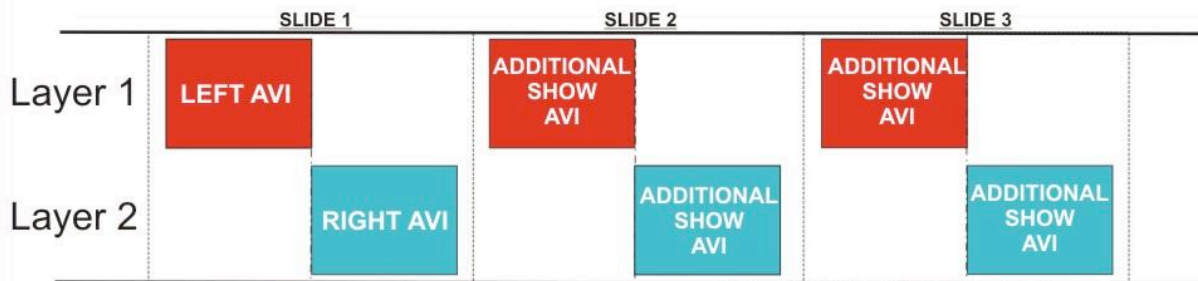


The screenshot shows a 'Create Video File' dialog box with the following settings:

- Video Preset:** Type is set to 'Custom'. Quality and TV System are empty.
- Format Settings:**
 - Format: 'AVI - Compressed' (dropdown), 'With Audio' checkbox is checked.
 - Compression: 'Xvid MPEG-4 Codec' (dropdown), 'Settings' button is visible.
 - Resolution: '2048' x '768'.
 - Framerate: '25.00' (dropdown).
- Display:**
 - Aspect Ratio: 'Square Pixels' (dropdown).
 - Rotation: 'No Rotation' (dropdown).
 - Encoding: 'High Quality' (dropdown).
 - Desaturation: 'Desaturate images to 80 %' (checkbox checked).
 - Anti-Flicker: 'Apply anti-flicker filter to video' (checkbox checked).
 - Color Profile: 'Create output for a specific ICC color profile: Adobe RGB (1998)' (checkbox unchecked, dropdown).

Buttons at the bottom: 'Create' and 'Cancel'.

DOUBLE SHOW METHOD (Combined)



THIS OPERATION CAN BE PERFORMED BY USING A VIDEO EDITOR OR OMITTED ENTIRELY
AS STEREOSCOPIC PLAYER WILL PLAY SEPARATE LEFT AND RIGHT AVI FILES
SATISFACTORY EXE SHOWS CAN NOT BE PRODUCED FROM AVI FILES

Note: We can use the left show only for non-stereoscopic presentations.

SUMMARY

Proshow in its various guises is a sophisticated but intuitive program. We have touched on just a few aspects of the workflow here with little said about audio and video content. Much more could also be said about the aspects that have been mentioned in this article. Undoubtedly more will be forthcoming from myself and others producing stereoscopic AV shows. It is hoped that an AV Group will be established within the Stereoscopic Society and the production of short five minute (AV-5) shows will ensue.