

Content 3D Creation Guidelines

3D content is easy to produce for the 3D projection system.

You can produce the 3D content yourself (working with any local production company) or AISsystems SrL can produce it for you. Real film, computer graphics (CGI) or a mix of both can be used to produce 3D content. To make the content look 3D on the 3D kiosk the following rules need to be used

1. 3D videos should be in a compressed format. **We use the AVI file format at 1024 x 786 XGA resolution, with a Divx MPEG-4 video codec.** We can encode your 3D content to work on a 3D kiosk or your content supplier can encode it using simple encoding software from AVS. Please see the URL below to purchase this software.

<http://www.avsmmedia.com/VideoTools/VideoConverter.aspx>

You can produce your content in any format then put it through the AVS video converter software to turn it into an AVI file at the right resolution with the correct codec. For example a QuickTime movie can be quickly converted into an AVI file with the correct codec with the AVS software. Please see the photo at the end of this document for the settings you should select for the AVS software.

2. The resolution of the videos is relatively low at 1024 x 786. The 3D kiosk resolution is actually not that important because the image size before it is projected in 3D is not very big. People are so wowed by the 3D projection they rarely notice resolution issues. We have a play list so we can string as many short Avi files together as required. The play list is easy to edit so this list can be changed by anybody as and when required. The system will auto run the play list once it has been switched on (after it has booted up). As AVI files can be linked together or repeated as many times as required, we would suggest keeping the individual AVI files quite short. 3D content does not have to be complex to make an impact on the viewer. A logo or product floating and revolving in space is remarkably affective at grabbing a viewer's attention.

3. The 3D kiosk display images in a 3D space but are in reality on a 2D plane. The trick is to make the image on the 2D flat screen in the system look as 3D as possible; rounded edges, shading, use of light and colour, moving objects in and out/ from small in the background to large in the foreground, and a variety of other tricks will enhance the 3D effect when the image is projected

4. **Never break the frame of the display screen.** If the viewer watches an object leave the screen they will see the edge of the display and the 3D effect can be dampened. There are lots of methods of leaving the screen such as fading and dissolving etc.

5. Certain colours pop on system. Colours can be used to amplify areas of the projection and create a more dramatic 3D effect. The use of black in an image needs to be carefully considered as black becomes see through and can effect the image.

6. **A black video background is very important to the 3D effect.** Again, we are hiding borders but we are also allowing the images to stand on their own without background interference, **this creates the 3D effect.**

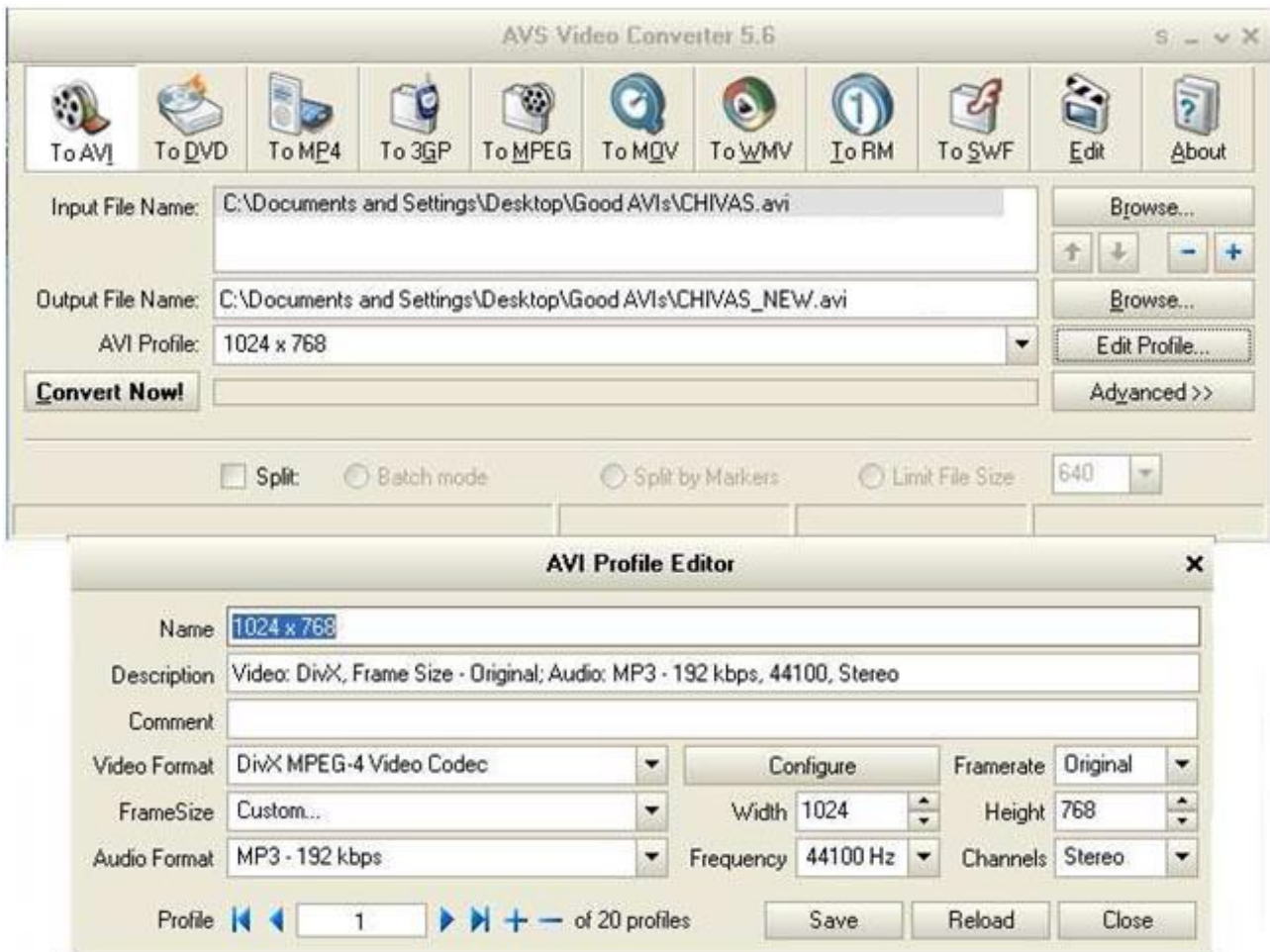
7. Certain types for screen motion can cause problems. For example, small objects can be moved more quickly than large objects. Fast motion is harder for the eye to interpret on a re-imaging 3D display than on a standard 2D display.

8. The system is not designed to be viewed at a very close distance. You need to put some distance between yourself and the display. This distance tends to vary for people. Some people like to be 30cm from the image, others like 90cm to 120cm or more. The 3D kiosk creates what is called an aerial image and it can be vexing for the eyes if viewed too closely.

9. Images should not be bigger than 60% of the screen size (1024 by 786). Image sequences should not bleed off the frame. Animation at 25 frames per second is typical.

10. Existing 2D content can be used on the 3D kiosk. By putting 3D content into a floating 3D frame / disc or by using the facets of a floating and rotating cube, normal video can be played. Mixing 2D video with specific 3D video works well. Flat 2D video will appear to float in space on 3D kiosk but it will look 2D

11. Keep content simple, and short. People will invest time looking at 3D content but you will probably only have their attention for a minute or two.



AVS VIDEO CONVERTER SOFTWARE SHOWING THE AVI PROFILE EDITOR OPENED WITH THE CORRECT SETTING REQUIRED FOR ENCODING 3D IMAGES AVI FILES. This software will create an AVI file 1024 by 786 in the right Divx codec required for the 3D kiosk.

Please note we can produce content and encode it for you if required. Please supply a brief and or story board if you require a quote for 3D content creation. Encoding fees are subject to the length of the 3D sequence/s. Encoding from AISsystems SrL is not expensive, typically a nominal fee will be charged. Please send us QuickTime movies at 1048 by 768 (with black back ground etc) if you want us to encode.

If you have any questions or need to see any sample videos please email ais@aissystems.it.