



VERSION 8.0.1.XXX - DEVELOPED BY: AVOLITES MEDIA LTD. POWERED BY: SALVATION (TM)
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GREG, ADAM, OLIE, ALL AT AVOLITES AND YOU. SPECIAL THANKS MARK CALVERT. LETS ROCK!

SVFX User Effects and Blend Modes

VERSION 8.X

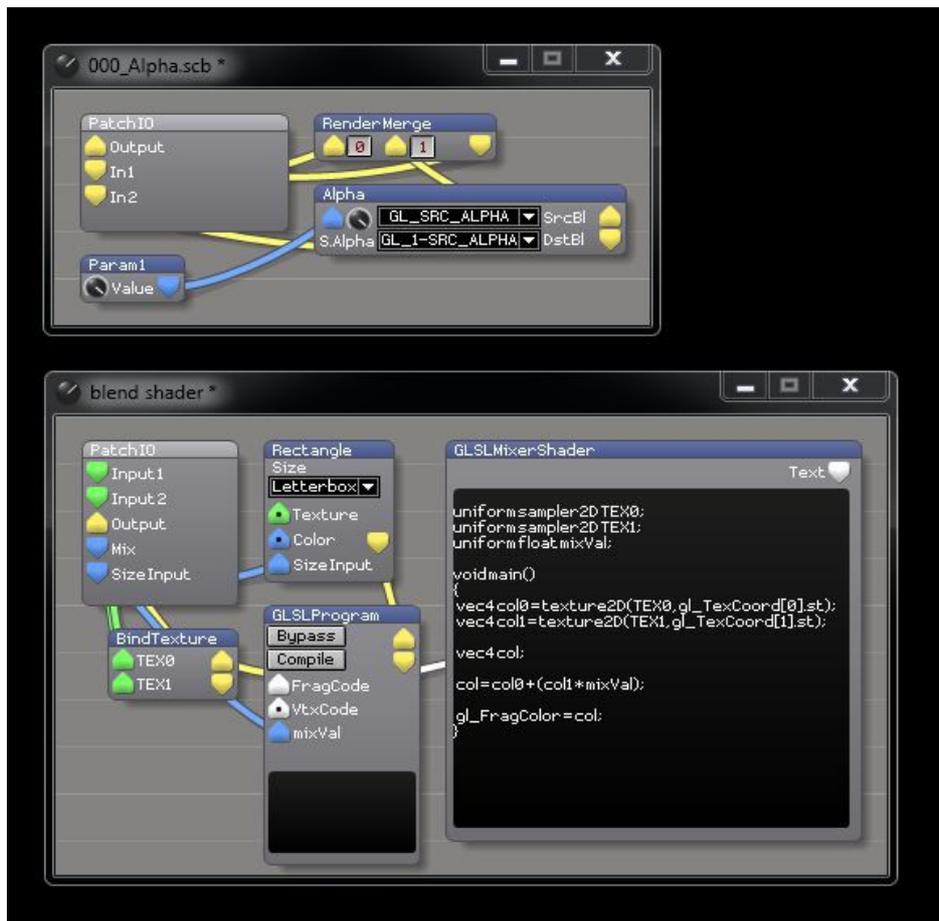
By Arran Rothwell-Eyre December 2014

with Additions by Dave Green & Ciaran Abrams

User Effects And Blendmodes

As of version 8 of Ai, we have created a system which allows the user to define their own blend modes and effects (known as SVFX). Both systems still retain the option to use the node based modular approach seen across the board in Ai and have access to the full range of Salvation functions and features which means that whether you are new to patching or very experienced in more complex elements such as shader code, there is a way to work with custom blend modes and effects that will suit you.

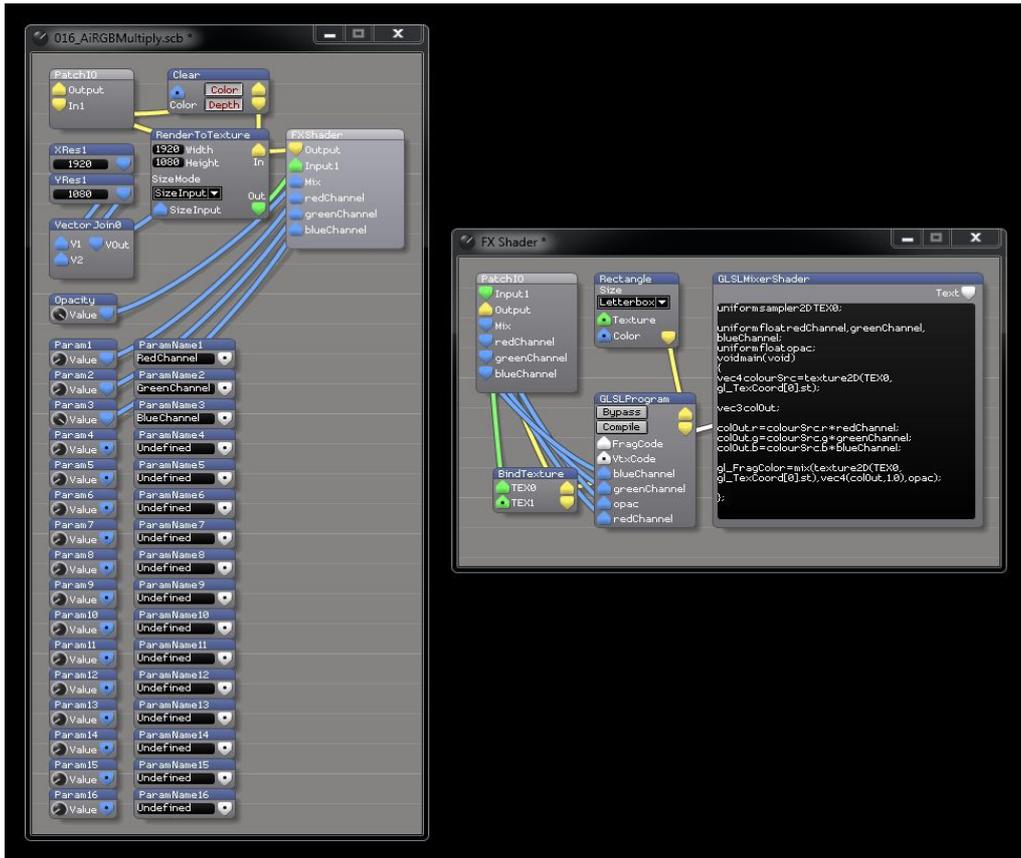
This first image shows us two windows – in this case 2 separate blend mode patches.



We can see from these windows two different approaches to creating your own blendmodes – the upper one is made by purely using existing Salvation modules to determine the functions and the order in which they occur, where as the lower window has an example which uses shadercode inside the GLSL program module. This secondary approach does require a greater knowledge of coding itself (specifically GLSL shader language) but does give the greatest amount of access to the core functionality of both Ai and OpenGL itself.

This next image shows us a typical SVFX patch. On the left we see the main window for the SVFX – its much like the media container used on the timeline in that our effect runs within the patch and lets us standardise the way in which the SVFX communicate with Ai. The smaller window on the right is the shader code found within this particular effect, but as with blendmodes you can use standard Salvation modules instead of or even together

with the shader code – it really comes down to how deep you wish to go.



When creating your own blendmodes and SVFX there are a few things to remember :

- Both SVFX and blendmodes need to have a number before the name, such as 001_Alpha or 016_AiRGBMultiply – this allows for remote selection via ArtNet of effects and integration with existing SVFX or blendmodes
- In the SVFX patches the names entered into the parameter boxes are the ones which will show within the effects engines.
- Within distrib/modules/effects there are folders for SVFX and blendmodes – this is where any user generated effects or blendmodes should be placed.
- You can find template patches in both the blendmode and SVFX folders.
- if you'd like to learn a bit more about shader code, the majority of our included effects are shader code, so can form a great set of examples to learn from, or alternatively a couple of good websites to start looking at are:

<http://www.opengl.org/documentation/gsl/>

http://www.wikipedia.org/wiki/OpenGL_Shading_Language