VERSION 8.0.1.XXX – DEVELOPED BY: AVOLITES MEDIA LTD. POWERED BY: SALVATION (TM) HARRISON DIGITAL MEDIA INC. DRIVEN BY: DAVE GREEN, TREY HARRISON, STEVE WARREN, J.B, CIARAN ABRAMS, SELVIN COOPER, ARRAN ROTHWELL-EYRE, SIMON GRAHAM, MARY, PRADS, GREG, ADAM, OLIE, ALL AT AVOLITES AND YOU. SPECIAL THANKS MARK CALVERT. LETS ROCK!

Auto Blend

VERSION 8.X

By Arran Rothwell-Eyre December 2014

with Additions by Dave Green & Ciaran Abrams

Auto blend

As of version 8 we are have launched 'Auto blend' a new camera based warp and blend feature to add to the Ai tool kit.

Quite simply, a camera based warp and blend allows you to setup your projectors, then aim a webcam at the projection target, then the software will project and analyse a series of test patterns and from this information it will generate warp and blend files to automatically adjust your projection to match the target. This has been successfully used on planetariums, very large projections using multiple servers and traditionally challenging mapping projects.

First of all, position your projectors and remove any projector based warping / keystoning, so that your projection is as flat and aligned as possible and then position your webcam so that as much of its view is filled with the projection area as possible. It is not necessary to use a specialised webcam for this process, although the higher the resolution the better as the test pattern analysis will give much more accurate results – preferably it will be an HD webcam.

Next, after running Ai, go to your patching window and for each output that you wish to address, add an Auto blend system patch. Each of these system patches needs to receive a texture from the canvas out port on the screen fixture and then have its yellow GL output connected to a video out module.

When these connections have been made, click on the configure button on any of the Autoblend patches which should open up the calibration tool. Look for the Calibrate button towards the bottom left of the calibration tool software and give that a press.

Keep pressing next until you get to the Camera Adjustment window and press the options button and then using the available controls you need to adjust your image settings so that your black and whites are clearly visible – generally this will involve adjusting the frame rate so that there is sufficient exposure in each frame, although the exposure control can also help with this. Once this is done, if you already have an existing mask, then it can be applied via the Load Mask button.

Press the next button when requested and take the calibration tool through the test pattern projection and analysis steps until you get to the final window which allows you to adjust how your image is applied to your screen and once you are happy with the results find the option to "Save Settings And Export", select a name and accept and then choose "Export Calibration".

From the display list that appears, choose "Display Compound", make sure that Generic Export Format is selected, export your files and then close the Vioso interface.

Back in Ai, on the first Autoblend system patch select the button corresponding to which output this module needs to represent. Repeat this process for each Autoblend patch. Once this has been done, you should now be able to turn on all of the output modules connected to the Autoblend patches and start mixing media to see the fully warped and blended results.