

Curved Surface Support

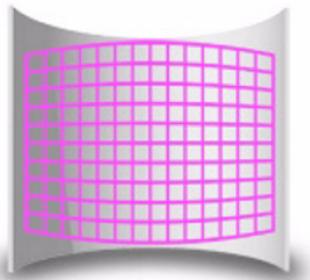
Curved Surface Support corrects for shape distortions that occur when you project onto surfaces that aren't flat. This Global effect option facilitates projecting onto convex or concave cylinders, angular screens, spheres, and disk shaped surfaces.

You can apply this correction to any DL.3 or DL.2 output including multi-fixture image Collages.

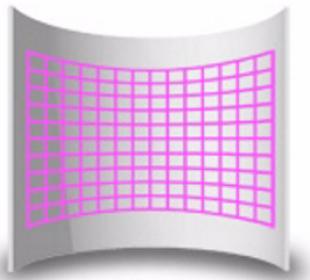
Use these adjustments in conjunction with Keystone parameters and Ratio parameters to refine the output shape on any of these surfaces.

Some Curved Surface Distortion Examples

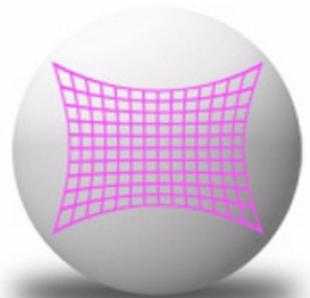
Before: Distortion from projecting onto a cylindrical surface curved away from the projector



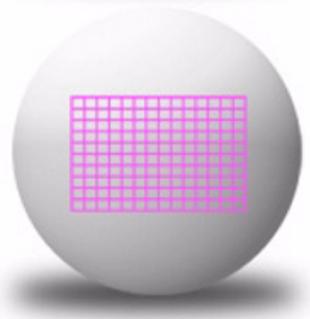
After: With the Curved Surface Support Effect option applied and adjusted, the image appears as it's original shape.



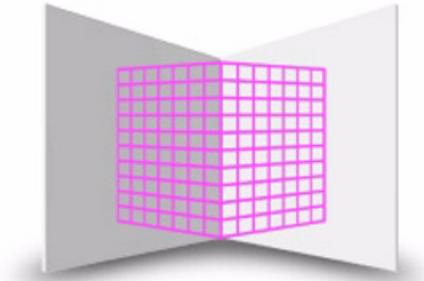
Before: Distortion from projecting onto a sphere



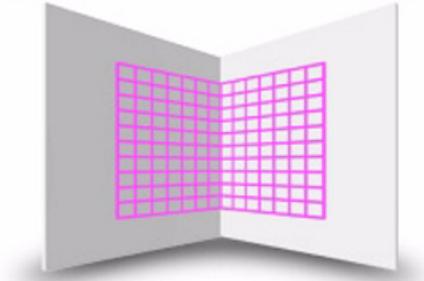
After: With the Curved Surface Support Effect option applied and adjusted, the image appears as it's original shape.



Before: Distortion from projecting into a surface angled away from the projector.



After: The Curved Surface Support Effect option is applied, the vertical and horizontal center can be adjusted to position the image on the two surfaces while maintaining the original shape.



Configuring Curved Surface Support with a DMX Console

Access the Curved Surface Support for a surface type in a Global Effects 1 or Global Effects 2 Parameter.

DMX Value	Surface
135	Vertical Cylinder opening toward projector (convex)
136	Vertical Cylinder opening away from projector (concave)
137	Vertical Corner opening toward projector (inside corner)
138	Vertical Corner opening away from projector (outside corner)
139	Sphere
140	Concave Disk opening away from projector

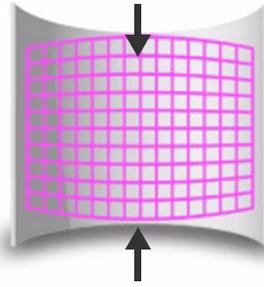
After you have selected the surface, use the Modifier parameters to control the amount of correction and the vertical and horizontal center points of the image.

TIP

Modifier channels for Effect Mode 1 are labeled as CMY in the Wholehog 3 system so you can also make use of the color picker, HSI, and other Wholehog 3 functions. Use the CMY parameter controls to adjust the three Effect Mode 1 Modifier parameters for both the Global and Graphic fixture types. The default for Effect Mode 1 is set to CMY1 as well. Effect Mode 2 Modifier channels are labeled Mod 1, Mod 2, and Mod 3.

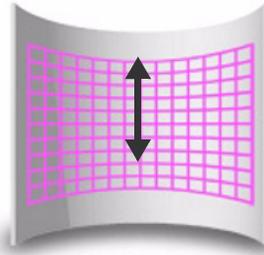
Modifier 1 Parameter

Modifier 1 lets you adjust the amount of correction vertically. A value of 0 = no adjustment. The correction increases as you increase value to maximum at 255 (100%).



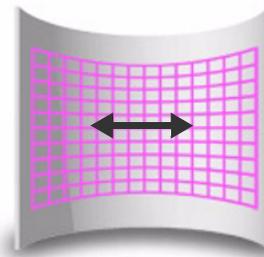
Modifier 2 Parameter

In situations where you are projecting from any angle other than perpendicular to the surface, you can use the Modifier 2 to adjust the vertical center of the image. A DMX value of 128 (50%) = no adjustment. Adjusting toward 0 moves the vertical center down to the bottom of the image. Values above the midrange move the vertical center up to the top of the image at a DMX value of 255 (100%).



Modifier 3 Parameter

In situations where you are projecting from any angle other than perpendicular to the surface, you can use the Modifier 3 parameter to adjust the image's horizontal center. A DMX value of 128 (50%) = no adjustment. Adjusting toward 0 moves the horizontal center toward the left edge of the image. Values above the midrange move the horizontal center right toward the edge of the image at a DMX value of 255 (100%).



NOTE: Modifier 3 horizontal adjustment is not used when projecting on concave and convex cylinders.