PIXEL-PERFECT PROJECTION CALIBRATION

OmniCal

Speed up your workflow with OmniCal, our industry-leading camera-based projector calibration system that radically improves quality and set-up times by creating 3D representations of surfaces in a single click.

Using structured light patterns to calibrate the relationship between cameras, projects and projection surfaces to sub-pixel accuracy, OmniCal makes masks and spills a thing of the past.

Choose from two kits

Wired Kits Designed to include everything needed to get your show up and running. The Omnical Wired kits come in two sizes, small or large, and include 5MP Machine Vision cameras, including filter and adaptor, and a selection of 6mm, 8mm and 12mm lenses - allowing for on the fly customisation to ensure the perfect setup.

Custom kits The Omnical Custom Kits allow you to select exactly what you need for your specific permanent or semi-permanent projection experience. Start with selecting case size, and then choose the number of cameras and the exact lenses needed for your project.

How it works

DISGUISE

Plan

Map out camera placements and generate test calibrations in your Designer project file for optimal camera placements within the physical space.

Set Up

Ensure that real cameras match up with the simulated camera plan, and check and adjust the camera exposure setting in Designer.

Capture

OmniCal captures images of the physical space and constructs a 3D representation of the projection surface in Designer as a point cloud.

Calibrate

View your point cloud to check for any calibration errors in pixels for each projector, and trigger recalibration via RigCheck API if necessary.

Align

Line up wireframe views of the projection surfaces with reality, and optionally add re-shape points to correct the shape of the mesh. As long as the camera or projection surfaces don't move, you will only need to do the alignment once.