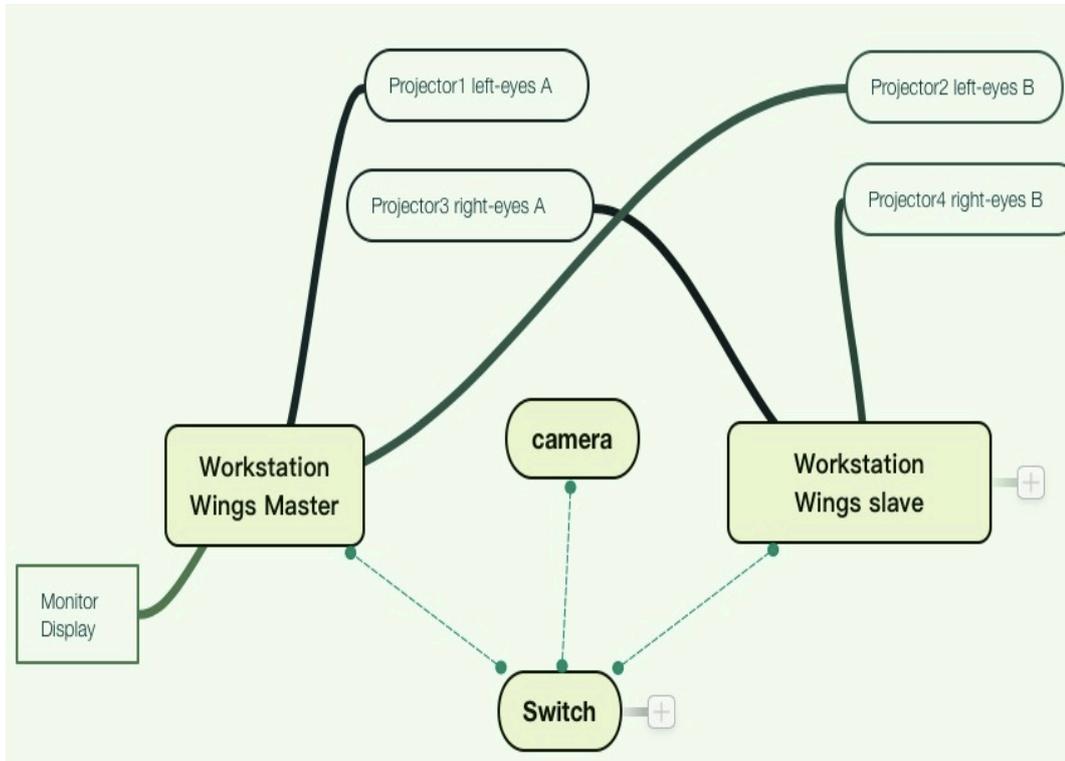


Projector calibration

How to make a calibration for stereoscopic setups using WingsVIOSO

This workflow describes how to calibrate a stereoscopic setup, where multiple projectors per eye are used:



The workflow is a bit different to "normal" multiclient calibrations: the „trick“ is to use the same warping file (VC) both on the master and the slave. That will make left and right eye matched pixel precise.

Preliminary considerations:

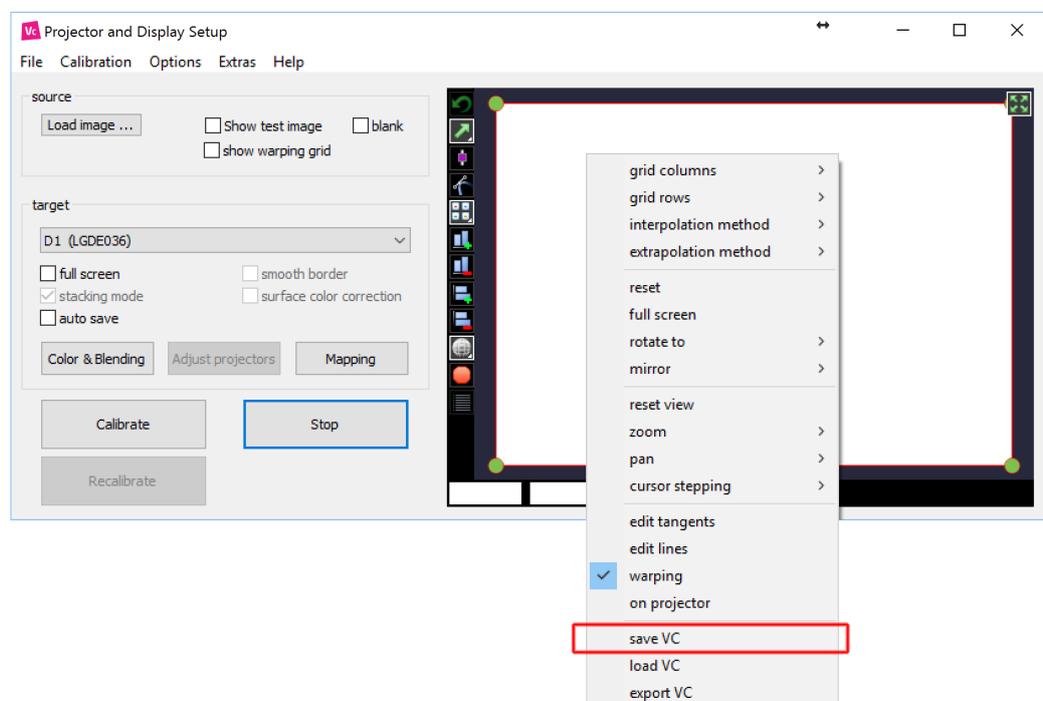
- This workflow assumes that you are using NVIDIA Quadro GPUs with full Mosaic support.
- It is mandatory that the camera is absolutely still, and not moved in any way until both calibrations are done.
- It is also mandatory to make the identical camera settings in both calibrations.
- Do not use the Wings-integrated calibration procedure. Instead, on each PC call VIOSO Calibrator stand alone (Wings Menu - Programs - VIOSO Calibrator)

Workflow:

1. Call the NVIDIA Control Panel and create an identical screen setup on Wings Master and Wings Slave:

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- a. Master: One Mosaic Group from Projector 1 + Projector 2
 - b. Slave: One Mosaic Group Projector 3 + Projector 4
2. Make a calibration for PJ1 and PJ2 on the master
- a. Use the local calibrator, not the calibrator workflow from within Wings VIOSO.
 - b. Note the settings you did for the camera.
 - c. Make everything right (blending, warping, mapping).
 - d. Then export it and save both the *.sps and *.vwf file to C:\ProgramData\AV Stumpf\Wings 5\VIOSO.
 - e. Then save the virtual canvas: right click on the warping dialog and select „save VC“ => you get a *.vvc file.
3. Make a calibration for PJ3 and PJ4 on the slave
- a. Use the local calibrator, not the calibrator workflow from within Wings VIOSO.
 - b. Use the same camera settings as for the master.
 - c. Just take care for proper blending, no need to optimize warping and mapping.
 - d. Copy the *.vvc file from the master and load it by right clicking on the warping dialog and select „load VC“.
 - e. Then export it and save both the *.sps and *.vwf file to C:\ProgramData\AV Stumpf\Wings 5\VIOSO.



4. In Wings VIOSO, create two screens (screen „left eye“, screen „right eye“).
- a. Configure the multidisplay areas so that they use Monitor 2 (the mosaic group).

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- b. Do not forget to enable „VIOSO Calibration“ in the screen and mulditsplay area.

5. Load the calibration:

- a. If the network configuration is correct, the Wings Slave will load the calibration also and both "eyes" are matched exactly while being combined with softedge blending
- b. For persistent use, save the calibration on both PCs with the name "_Startup.vwf"

Unique solution ID: #1063

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Last update: 2017-07-04 11:29