Optoma ProScene Geo Module BE-BWM01 – Setup Guide

"How to do a 2 projector stack on a flat surface using 4-corner correction"

Welcome to this step-by-step guide on how to use the optional Geo Module BE-BWM01 for stacking the images of two Optoma ProScene EX855/EW865 projectors. (More projectors can be added to your project, however the same principles apply but with a few settings being altered along the way)

This guide assumes that the GEO boards are already installed into your projectors and that they are running firmware version C18 to support the GEO features. This can be checked using the Information panel accessible from the projector's on-screen-display (OSD) menu.

NB: After following these instructions, be sure to read the hints at the end to ensure consistent, reliable performance from your setup long-term.

1. Download & Install the free "Optoma Blending Tool" software:
   (Available from www.optoma.com it can be found in the download section of the relevant projector products)

2. Connect your equipment as shown below:
   (For a simple stacking, it is only necessary to use a single GEO Board, but we recommend connecting both units to the LAN for control)
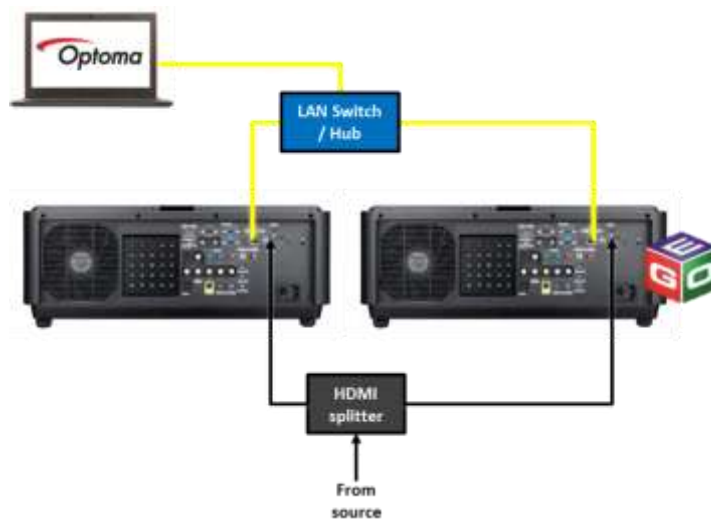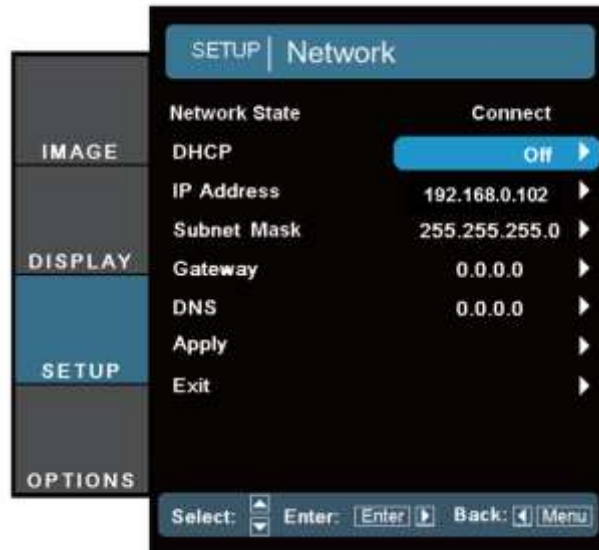
3. Power ON projectors.

4. Set manual IP addresses via the projectors OSD menu (Options -> Networking):

   Left = 192.168.0.102
   Right = 192.168.0.101
   Control PC = 192.168.0.1 (please refer to your computer's user manual)
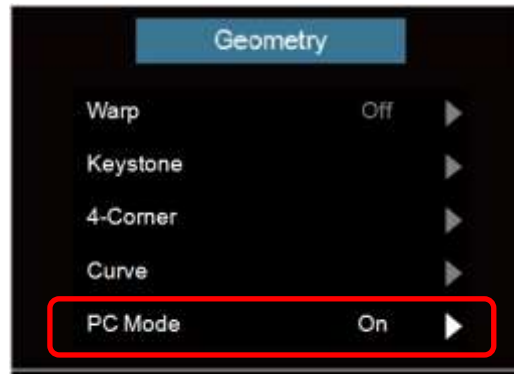

5. Check both projectors are connected correctly by entering their IP address in a browser. If each projector's web interface loads correctly, you are OK to proceed.

6. Use the projector's OSD Menu to enable PC mode on the unit with the GEO board installed:
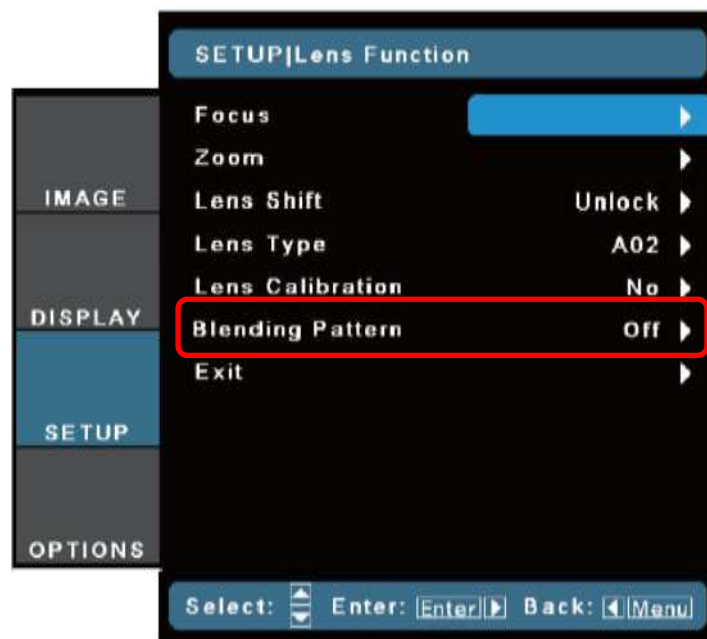   DISPLAY -> Geometry -> PC Mode -> ON
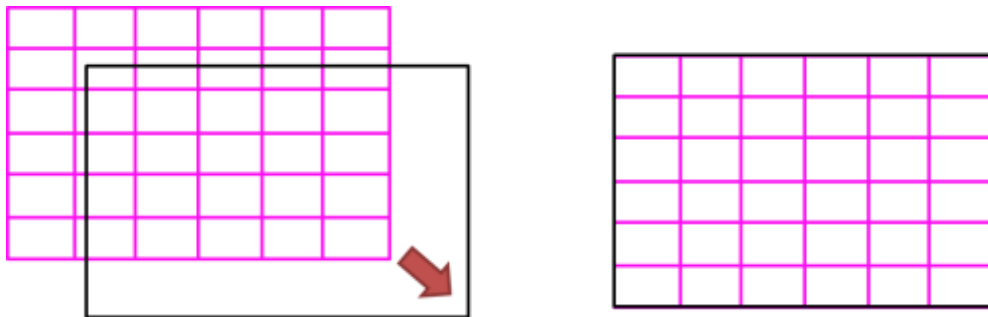   (NB: "WARP" must be set to OFF for PC mode to be enabled)

7. Now you will need to enable the test patterns on the projectors to correctly align them:
   -> SETUP -> Lens Function -> Blending pattern -> Geo=Green and No-Geo=Magenta

8. Use the projector **without** the GEO board as your master image - Align it to your screen using the projectors lens shift pattern.


9. Now align the image of the projector with the GEO board to be very slightly larger than the screen. (We can use the 4-corner warp to re-align them later)
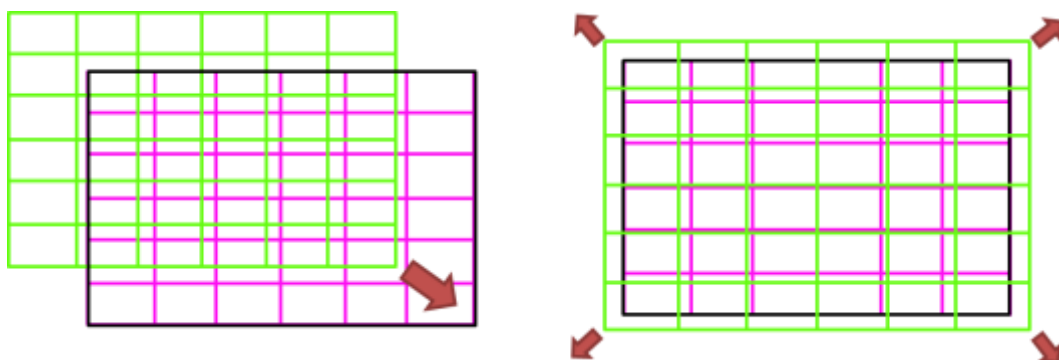
10. Connect source device (eg. PC / Laptop) and select the relevant source on both projectors.(eg. HDMI) You can also enable "Source Lock" in the projector's OSD to ensure that it will always look for this source if the connection is lost.

11. If the desired resolution is higher than that of a built in laptop display, ensure the source device is set to output to the external monitor only (in Windows 7 this is done by pressing Win + P)
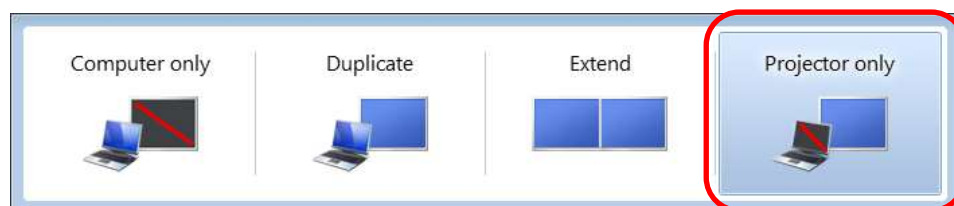
12. Launch the "Optoma Blending Tool" and select "Geometry function on a single projector."
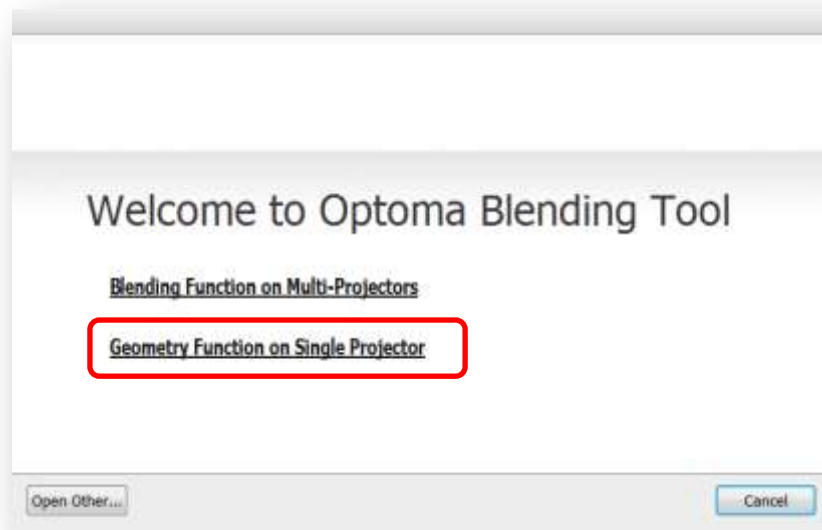
13. Select the resolution of your projectors: (NB: they must both be the same)
- EX855 = XGA
- EW865 = WXGA

(NB: You cannot edit the resolution later - this will require a new project, so be sure that you have them correct before you do the 4-corner adjustment)

14. Lastly, enter the IP addresses of the projector with the GEO board installed (from step 4.)

15. Once the software has connected to the projector, the main window appears. (If the software says that there is no connection, or that "the device is busy and must be reset" – go back and check if you have enabled "PC Mode" in the geometry menu of both projectors.)


16. Check that the software is communicating with the projectors by clicking the "Test pattern" button. Which will enable/disable the test patterns in a cycle.

17. Click on the "Four corner" button to adjust the grid alignment.

18. The corners can be adjusted either by dragging the points, adjusting the arrows or by entering values (and pressing enter to confirm) - It can take a few seconds to update, so be patient if you need to make a lot of adjustments.
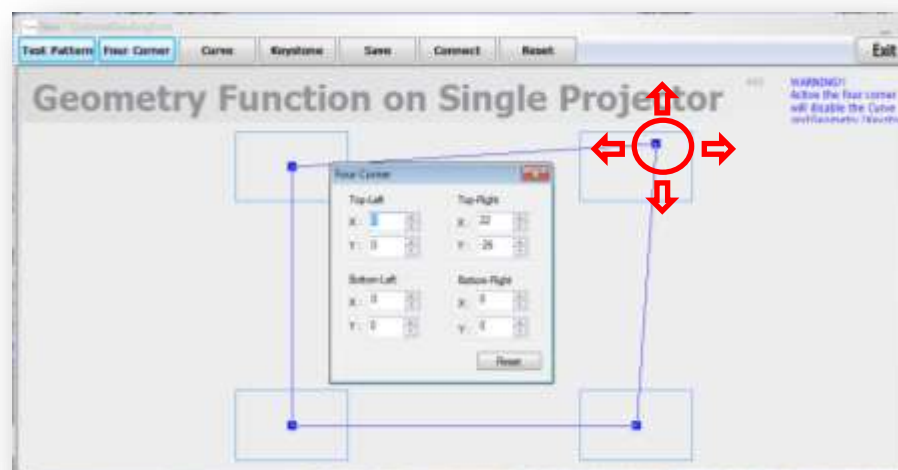
NB: As you are doing a simple stacking project using 4 corner adjustment, it is unlikely that you will be able to match both images perfectly. It may be necessary to trade-off perfect alignment at the edges/corners to gain a better overall result in the centre. (For Advanced stacking using multi-point grid adjustment, Optoma can offer a wide range of solutions – please visit www.Optoma.com for more information)

19. After this, **we highly recommend saving your project**, so that you can easily load it again later. Click the save button and type a filename for your project (Including the resolution/crop settings in the filename can save a lot of time searching later)

<u>Hints / Troubleshooting:</u>

- Seeing as the Geo module uses the on-board scaling of the projector, <u>**it is essential that the source device provides the same resolution to the projector at all times**</u>. Switching inputs or resolution will reset the scaling and you will need to re-upload your project to the Geo boards using the Optoma Blending Tool via a LAN connection.
- Be careful not to press the "reset" button in the main window accidentally – this will reset all of your GEO modules to their factory default settings… Including resetting "PC Mode" to OFF. However, if you do this by accident you can easily re-enable PC-mode in the projectors OSD using the keypad, remote, or via the Crestron web interface.