LiteLOC™ 2.0 calibration

The LiteLOC™ 2.0 feature automatically adjusts the light source output to maintain constant lumens and white point within the environmental operating range of the projector. With this feature, the user can dial in brightness at a specified white point. While projectors are calibrated before they leave the factory, a calibration in the field may be required if the projector is upgraded to be LiteLOC 2.0 compatible or as needed over the lifetime of the projector.

Affected products

The following products are affected:
- D4K40-RGB
- Mirage 4K40-RGB

Calibrating the LiteLOC™ version 2.0 feature

Follow this procedure to generate the calibrated data.

1. Download the LiteLOC version 2.0 Calibration workbook from the Christie website.
   a) Go to URL: https://www.christiedigital.com/products/projectors/all-projectors/
   b) On the product page, select the series > model and switch to the Downloads > Technical Reference tab.
2. Ensure the projector is set up in representative ambient light.
3. Setup a spectroradiometer, such as the CR-250, on a tripod.
   If not using the CR-250 or better, Christie recommends placing the meter perpendicular to the screen to achieve accurate measurements.
4. Power on the projector.
5. From the display panel, select MENU > Configuration > Light & Output Settings > LiteLOC.
6. To disable LiteLOC, select LiteLOC disabled.
7. Set the red, green, and blue drive levels so the brightness and color are similar to what the application requires.
8. Allow the light source to stabilize.
   This can take approximately 10 minutes.
9. Establish a connection to the photon controller using Kore Librarian on port 5103.
10. In row 7 of the LiteLOC 2.0 Calibration workbook, enter the current settings for red, blue, and green.
    The drive percentages in columns A, B, C are calculated based on the current settings. The example values in the workbook are red=66.92%, green=58.81%, and blue=59.48%.
11. To set the laser drive levels for row 13 of the workbook, run the command from column K (RGB +MODE 1 IR IG IB) in Kore Librarian.
   For example, for row 13 run (RGB+MODE 1 6692 5881 5948) in Kore Librarian.

12. Perform the measurement using the spectroradiometer and record the returned values for X, Y, and Z in columns G, H, and I of the workbook.
   For example, $X=1022$, $Y=1045$, and $Z=1079$.

13. To obtain the color sensor values for the first set of drive percentage values in row 13, run the command from column K, row 25 (RGB+MEAS?) in Kore Librarian.

14. Record the returned values for SX, SY, and SZ in columns D, E, and F of the workbook.
   For example, $SX=3542528$, $SY=3389696$, and $SZ=2877952$.

15. Repeat steps 11 to 14 for rows 10 to 21.

16. From row 26 of the workbook, copy the highlighted command and run it in Kore Librarian.
   For example, copy (RGB+CAL2 "3429" "405" "72" "0" "236" "2918" "152" "0" "-193" "-14" "2545" "0" "-2175" "-57636" "-96936" "1" "1660" 1 0) to Kore Librarian and run the command.

17. Restart the projector.

18. From the display panel, select MENU > Configuration > Light & Output Settings > LiteLOC.

19. To enable LiteLOC, select LiteLOC 2.0.

Technical support

Technical support for Christie Enterprise products is available at:

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- Europe, Middle East, and Africa: +44 (0) 1189 778111 or Support.EMEA@christiedigital.com
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  - Australia: +61 (0)7 3624 4888 or tech-Australia@christiedigital.com
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