Technical Bulletin

CineLife+ software versions 1.4.0 and 1.4.1 LOS-to-Sensor calibration issue

This bulletin is to advise on a possible issue with CineLife+ software versions 1.4.0 and 1.4.1.

The projector displays a LiteLOC™ error if an issue exists. The error is caused by a fault in the LOS-to-Sensor calibration creating erroneous values causing LiteLOC to drive the lasers to zero. The issue cannot be addressed by disabling LiteLOC as this option is not available in the enhanced LiteLOC feature.

The issue only affects CP4440-RGB and CP4450-RGB projectors and is seen shortly after an upgrade to version 1.4.0 or 1.4.1. However, this issue is not seen on all CP4440-RGB and CP4450-RGB projectors. If you have successfully upgraded to version 1.4.0 or 1.4.1 and have not seen this issue, you do not need to take any action.

If you upgraded directly from version 1.3.0 (or earlier) to version 1.4.2 (or later), this bulletin does not apply as you will not experience the issue described.

Background to the issue

The new enhanced LiteLOC feature was introduced in CineLife+ software version 1.3.x for CP4415-RGB and CP4420-RGB and CineLife+ software version 1.4.0 CP4440-RGB and CP4450-RGB projectors.

After upgrading CP4440-RGB/CP4450-RGB to revision 1.4.x, the system automatically runs a new calibration known as LOS-to-Sensor calibration. To take advantage of the new enhanced LiteLOC, the Sensor-to-Screen calibration must be run. For details, refer to the *LiteLOC™ Calibration for Cinema Projectors instruction sheet (P/N: 020-103436-XX)*.

After the calibration, the new LiteLOC feature simplifies the process for creating the laser configuration file such as:

- Instead of adjusting the individual colors, only the white point is required and then the projector automatically adjusts the drive current for the three colors to achieve the required white point.

- Instead of predicting the maximum expected ambient temperature or set the chiller temperature, the projector provides the highest ambient conditions at which it can maintain the required brightness/white point.

In addition, after the calibration, the following cannot be done:

- Manually adjust the R, G, and B drive current to create the laser configuration files (similar to LiteLOC V1. 6).

- Disable LiteLOC in normal operation conditions.

Disabling LiteLOC™ if upgraded to CineLife+ version 1.4.0 or 1.4.1 and executed Sensor-to-Screen calibration

If you have already upgraded to version 1.4.0 or 1.4.1 and are experiencing the LiteLOC™ error, the following steps disable LiteLOC and allow your system to put light on the wall.

In summary you will:

- Remove the Sensor-to-Screen calibration file.

  This disables Enhanced LiteLOC (also known as LiteLOC v3) and sets the system back into LiteLOC v1 mode.

- Disable LiteLOC.

> You will be asked to save the existing Sensor-to-Screen calibration information before deleting the file. You can reuse this calibration information after software version 1.4.2 is installed.

1. Read the Sensor-to-Screen calibration of the color sensor board (CSBD):
   a) Connect to the projector using Kore Librarian or NetTerminal.

      Use the projector IP address and port number 5000.

   b) Open port 5103 by sending the command (CAL + PASS 1).

   c) Disconnect from port 5000 and connect to the projector using port 5103.

   d) Send the command (RGB + CAL2 ?).

   e) Save the returned information in a separate document.

      Performing this step saves you the time to run the Sensor-to-Screen calibration after upgrading to CineLife+ software revision 1.4.2 or higher.

      > The first value in the returned information is the projector serial number and is not required when sending the (RGB+CAL2) command in step 7 of the *"After upgrading to software version 1.4.2" procedure* (on page 2).

2. Delete the Sensor-to-Screen calibration while connected to port 5103:
   a) Send the command (RGB + INVL 1).

   b) Send the command (RGB + INVL 1 "FACTORY").

   c) Reboot the projector to revert to LiteLOC V1.

   This reverts the projector user interface to LiteLOC V1 style.

3. Disconnect from port 5103 and connect to port 5000.

4. To close port 5103, send the command (CAL + PASS 0).

5. Install CineLife+ software version 1.4.2.

After upgrading to CineLife+ software version 1.4.2

After upgrading to CineLife+ software version 1.4.2, you must force the projector to rerun the LOS-to-Sensor calibration. This is done by deleting the existing LOS-to-Sensor calibration file (the system automatically regenerates it when the lasers are turned on again). You then restore the Sensor-to-Screen calibration you saved in the procedure above. After completing this procedure, Enhanced LiteLOC (also known as LiteLOC v3) is re-enabled and your previous Sensor-to-Screen calibration is in place.

1. Turn off the lasers.

2. Connect to the projector using Kore Librarian or NetTerminal.

   Use the projector IP address and port number 5000.

3. Open port 5103 by sending the command (CAL + PASS 1).

4. To delete the existing LOS-to Sensor calibration, send the commands (RGB+INVL 2) and (RGB +INVL 2 "FACTORY").

5. Turn on the lasers.

6. Wait for 15 seconds.

    During this time, the system automatically runs the LOS-to-Screen calibration. To confirm the calibration process has completed, send the command `(SST+HLTX?)`. The command sends an `OK` response when the calibration is finished.

7. Restore the Sensor-to-Screen calibration saved earlier.

    The example command is shown below:

    ```
    (RGB+CAL2 "5137" "610" "345" "0" "534" "4490" "34" "0" "−167" "57" "1640" "0"
    "−125503" "−133936" "−57954" "1" "637" 1 0)
    ```

8. If the information shown in step 7 is not available, run the Sensor-to-Screen calibration again.

9. Turn off the laser.

10. Disconnect from port 5103 and connect to port 5000.

11. To close port 5103, send the command `(CAL + PASS 0)`.

12. When the cool down completes, reboot the projector.

13. Create the laser files and their associated MCGD files.

Technical support

Technical support for Christie Cinema products is available at:

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*   Christie Professional Services: +1-800-550-3061 or *NOC@christiedigital.com*