

# **Technical Bulletin**

# Inactive pixels in a Cinema projector setup

This bulletin provides information regarding the potential for pixel failure from inactive pixels in masked or cropped zones of the projected image (for example, Scope or Flat screen formats). The pixel failure does not affect normal operation or impact the visible image.



The following show several use cases where some of the DMD pixels are permanently masked:

- The resolution of the content is lower than the resolution of the DMD (Letterbox and Pillarbox).
- Keystone correction is applied in tilt angle installations.
- When using tools such as Mystique or Twist<sup>™</sup> to improve misaligned images.

#### Resolution

To resolve the issue, exercise the DMD micromirrors for 45 minutes daily:

- 1. Update the automated script to do one of the following:
  - Turn the lasers on for 45 minutes before the normal start time.
  - Leave the lasers on for 45 minutes after the normal shut down time.
- 2. During the 45 minute period, display the 50% Gray test pattern.

  If displaying the 50% Gray test pattern through a media server, make su
  - If displaying the 50% Gray test pattern through a media server, make sure to display the entire resolution of the DMDs so all the micromirrors are being exercised.
- 3. If the image is geometrically corrected using tools such as Mystique or Twist, disable the geometry correction during the 45 minute period.
  - Make sure to re-enable the geometry corrections at the end of the 45 minutes.



## **Affected products**

The following products are affected:

- CP4435-RGB
- CP4440-RGB
- CP4445-RGB
- CP4450-RGB
- CP4455-RGB

## **Technical support**

Technical support for Christie Cinema products is available at:

- Support.cinema@christiedigital.com
- +1-877-334-4267