

Technical Bulletin

Effects of local dimming on image content

The local dimming feature improves the contrast ratio on LCD flat panel monitors and is ideally used when a mixture of content, particularly moving images, is displayed.

This feature varies the intensity of the LCD backlight in a specific zone according to the Average Picture Level (APL) of each image in a set of content. While the local dimming feature works well on continuous-tone images, displaying content with a dark background might produce unexpected effects on some types of images.

For example, if content includes graphics that contain constant-intensity lines, the rendered intensity of a line might vary across the display as it passes through each of the local dimming zones. This is especially noticeable in an array that contains multiple display panels.



Affected products

The following products are affected.

- Christie FHD552-X
- Christie FHQ552-T
- Christie FHQ842-T
- Christie FHQ981-L



Resolution

Steps for resolving the issue.



To avoid mura and for improved image quality, by design, local dimming cannot be turned off on the FHQ981-L.

Turn off local dimming.
The black level of the LCD panel increases, and some light leakage might be visible.



2. In the **Image Settings** menu, adjust the **Backlight** value to approximately 20 and the **Brightness** value to 50.



- 3. Manually adjust the **Backlight** setting to balance the uniformity of the black level with the light leakage.
 - Note that in some cases, it is more important to have a uniform black level than it is to match all display panels in an array for white uniformity.
- 4. If required, adjust the contrast to maximize the intensity of the content, without causing the image to saturate.

Technical support

Technical support for Christie products is available at:

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