

Special Care for your OLED Screen

Disclaimer: This document is written specifically for the AG456UCZD monitor and is not valid for other models.

To ensure the longevity and optimal performance of your OLED monitor, we've curated this Special Care Guide with proactive measures against burn-in. Please follow these guidelines not only to safeguard your monitor but also uphold the 3-year OLED warranty protection. The 3-year OLED warranty protection is granted to you on the condition that you use your OLED screen in accordance with this Special Care Guide.

Please follow the following points in order to properly care for your OLED monitor:

- **Avoid static images:** Do not display a still image for an extended time (4 hours). If an image needs to be displayed for an extended period of time, then it is best to reduce the brightness and contrast as much as possible.
- **Maximize screen usage:** When viewing letterboxed or pillar-boxed videos, utilize the full screen for optimal viewing experience.
- **Do not apply stickers:** Adding additional material to the monitor's screen may increase the risk of OLED burn-in.
- **Avoid direct sunlight:** OLED displays are highly sensitive to harsh environments and external factors. Direct exposure to sunlight or ultraviolet illumination can significantly degrade the screen, reducing luminosity, brightness, and overall lifespan.
- **Regulate ambient temperature:** Ensure the monitor is operated within the recommended temperature range. Extreme temperatures, both hot and cold, can negatively impact the display, potentially leading to pixel reduction, irreparable damage, or complete failure.

To provide additional care for your QD OLED monitor, several advanced features are included to prevent image retention and burn-in:

Screen Saver

When a static image is detected for a certain period of time, the screen saver function will dim the screen to protect the panel from image sticking, which could lead to burn-in. In contrast, when a moving image is detected, the monitor will recover luminance to previous working status. The default setting for the screen saver function is set at slow and may change to fast if needed.

Pixel Orbiting

The Pixel Orbiting feature will slightly shift the displayed image at the pixel level every second to reduce the risk of OLED burn-in. The default setting of this feature is "slow" but can be adjusted to "Normal" or "Fast" in the OSD. It is recommended to keep this feature enabled for optimal protection.

Pixel Refresh

Pixel Refresh is an automatic function that helps restore screen uniformity after prolonged use. After 16 cumulative hours, Pixel Refresh will start automatic to ensure continued screen health. The Pixel Refresh process takes around 15 minutes.

If the Auto Warning option is enabled in the OSD settings, you will receive a notification suggesting Pixel Refresh after 4 cumulative hours of usage. This notification appears on the middle-right part of your monitor and disappears after 10 seconds. If you turn off the monitor at this point, Pixel Refresh will start automatically.

If the monitor is in standby mode for 15 minutes, the monitor will automatically start the pixel refresh and go into power-off mode. The idea is that this can happen at night; therefore, the next day, your monitor is fresh for use!

Only after 15 hours and 50 minutes of continuous use does the pixel refresh become mandatory. A sequence of popup messages will then appear in the cadence of 10, 5, 4, 3, 2, and 1 minute(s). After the final warning has been made, the Pixel Refresh process will automatically begin.

To notify the user that the Pixel Refresh feature is underway, the power indicator will blink on and off until complete.

To check how many times Pixel Refresh has been activated, users can check the status under the “OLED Information” section of the OSD “Setup” menu.

Please note that Pixel Refresh is mandatory to protect your screen from OLED burn-in and cannot be disabled.

Additional Recommendations

The following features are set to "off" by default, but can further protect your monitor against QD OLED burn-in. It is recommended to enable these functions to provide additional protection for your panel:

Auto Warning

It is possible to disable all popup messages related to OLED burn-in via the OSD menu. Even with these messages turned off, the system will automatically conduct the Pixel Refresh process to mitigate the risk of OLED burn-in.

Multi-Logo Protection

If multiple static logos are detected on the screen, enabling Multi-Logo Protection is recommended. This feature dims specific areas of the screen to prevent image retention where logos appear.

Boundary Dimmer

For screens with unique aspect ratios that include black bars or split-screen displays, the Boundary Dimmer automatically detects and adjusts the brightness in areas with significant brightness differences.

Taskbar Dimmer

The Taskbar Dimmer reduces the brightness of the taskbar area without affecting the rest of the screen, ensuring a consistent viewing experience.

Thermal Protection

When the monitor’s temperature exceeds 60°C, Thermal Protection automatically dims the screen to help regulate heat dissipation. It is recommended to keep this feature enabled for optimal performance. If the internal temperature of the monitor exceeds 45°C, Pixel Refresh and Panel Refresh cannot be activated.

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