msi MAG 321CUP QD-OLED

MSI MAG 321CUP QD-OLED 32-inch UHD Gaming Monitor User Manual

Model: MAG 321CUP QD-OLED

1. INTRODUCTION

This manual provides detailed instructions for the setup, operation, maintenance, and troubleshooting of your MSI MAG 321CUP QD-OLED 32-inch UHD Gaming Monitor. Please read this manual thoroughly before using the product to ensure proper functionality and to maximize your viewing experience.

The MSI MAG 321CUP QD-OLED monitor features a 32-inch 3840x2160 (UHD) QD-OLED panel, a 165Hz refresh rate, and a rapid 0.03ms (GtG) response time. It is VESA certified for ClearMR 9000 and DisplayHDR True Black 400, offering vivid images and reduced motion blur. OLED Care 2.0 is integrated to minimize the risk of OLED burn-in. For console gaming, it includes HDMI 2.1 ports with 48Gbps bandwidth, 120Hz support, VRR, and ALLM.

2. WHAT'S IN THE BOX

Verify that all items listed below are present in your product package:

- MSI MAG 321CUP QD-OLED Widescreen Gaming OLED Monitor
- 1 x HDMI Cable (2.1)
- 1 x DisplayPort Cable (1.4)
- 1 x Power Cord (C13)
- 1 x Quick Guide
- 4 x VESA Wall Mount Screws

3. PRODUCT FEATURES

The MSI MAG 321CUP QD-OLED monitor is engineered with advanced features for an optimal gaming and viewing experience.
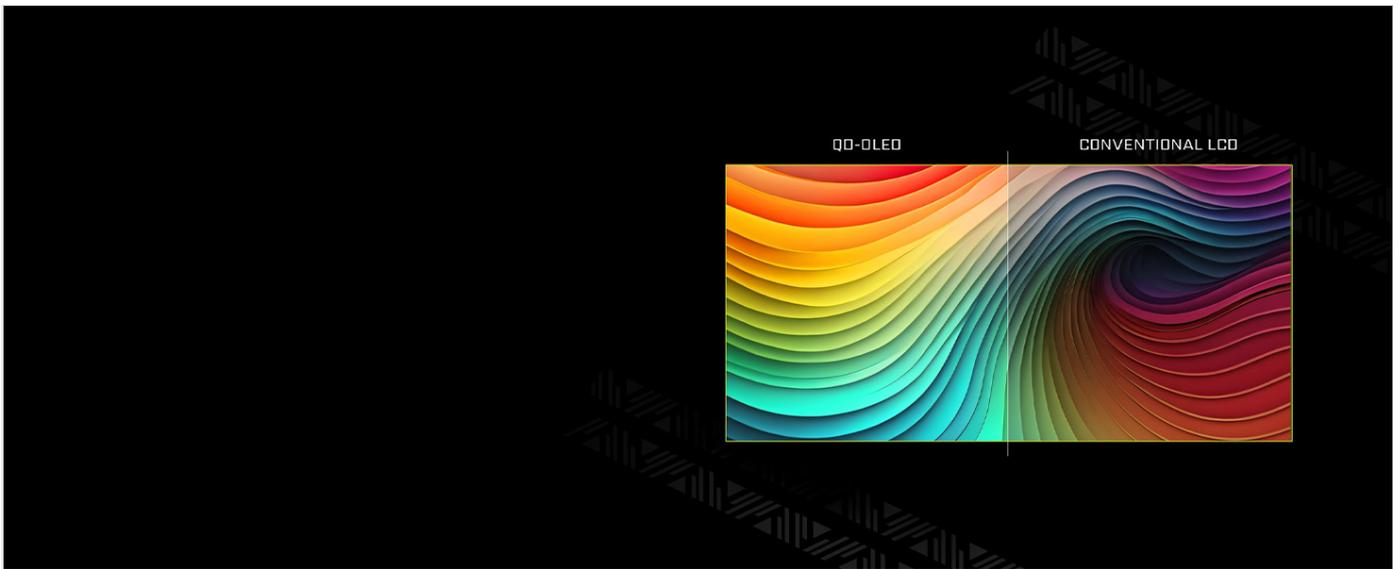
3.1 QD-OLED Panel Technology

Image: Comparison of QD-OLED Panel and Conventional LCD.

The QD-OLED panel combines a blue self-emitting layer with Quantum Dot technology to produce vibrant colors and exceptionally deep blacks, enhancing visual fidelity.

3.2 High Refresh Rate and Response Time

Image: Visual representation of 165Hz refresh rate and 0.03ms GtG response time.

Experience smooth, fluid motion with a 165Hz refresh rate and an ultra-fast 0.03ms (GtG) response time, crucial for competitive gaming and fast-paced content.

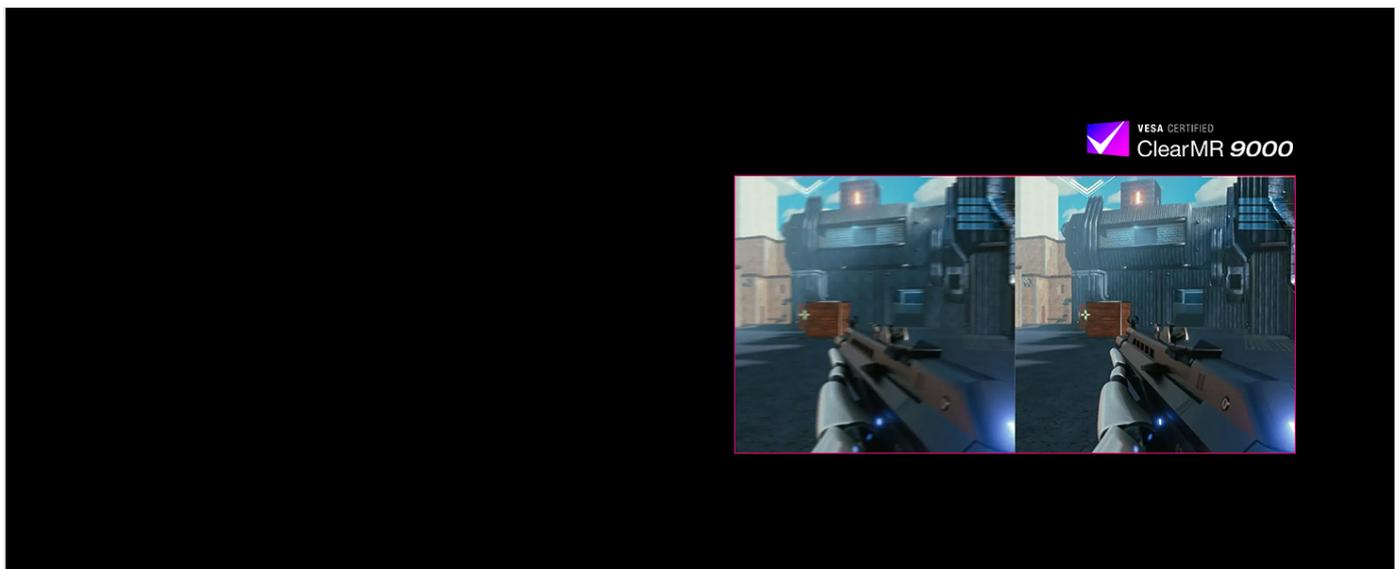## 3.3 VESA ClearMR 9000 Certification

Image: Demonstration of ClearMR 9000 certification for clear pixel performance.

The monitor has successfully passed ClearMR 9000 certification, ensuring exceptional clarity and minimal motion blur during fast-moving scenes.

3.4 OLED Care 2.0

Image: OLED Care 2.0 logo, indicating burn-in prevention features.

OLED Care 2.0 provides multiple services designed to significantly reduce the chances of OLED screen burn-in, preserving the display's longevity and quality.

3.5 Connectivity Options

Image: Close-up view of the monitor's input/output ports.

The monitor offers versatile connectivity including 2x HDMI 2.1 ports (UHD@165Hz), 1x DisplayPort 1.4a, 1x USB Type-C (DP Alt. Mode), and a Headphone-out jack.

3.6 Console Mode and Adaptive Sync

The monitor's Console Mode provides HDMI 2.1 with full 48 Gbps bandwidth, 120Hz support, Variable Refresh Rate (VRR), and Auto Low Latency Mode (ALLM) for an optimized console gaming experience.
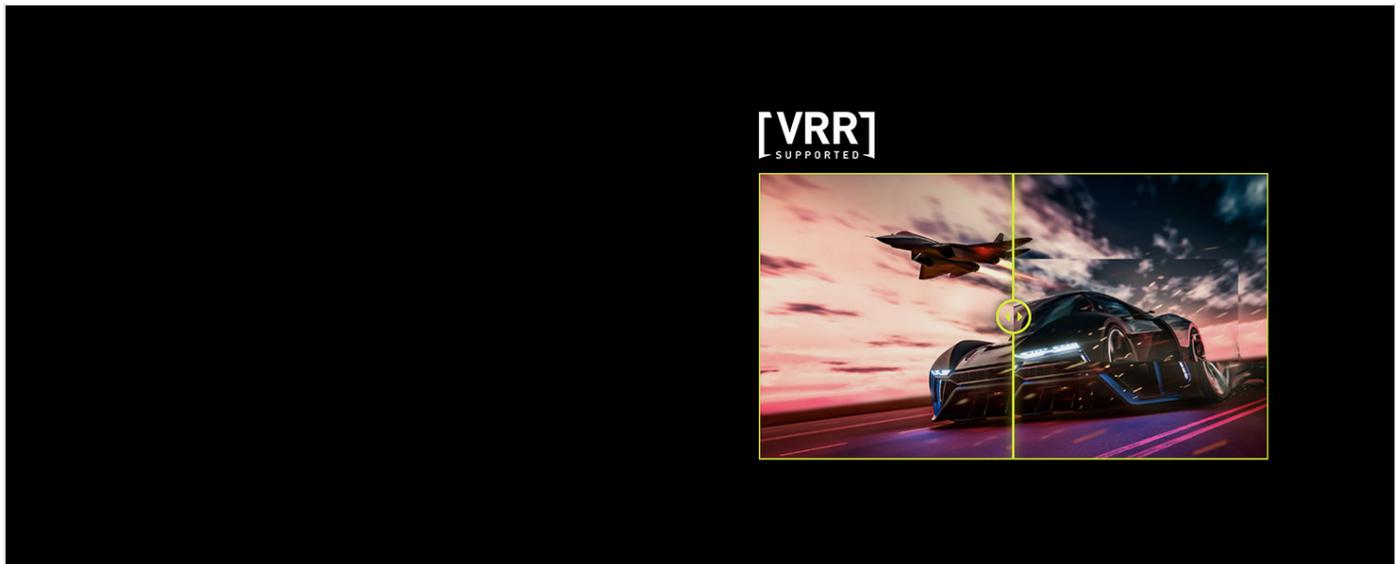

Image: Graphic illustrating VRR (Variable Refresh Rate) support.

Adaptive-Sync technologies like AMD FreeSync Premium Pro and G-Sync Compatible support ensure tear-free and stutter-free gaming by synchronizing the monitor's refresh rate with your GPU's frame rate.

4. SETUP

4.1 Assembling the Stand

1. Carefully remove the monitor and stand components from the packaging.
2. Attach the stand base to the stand column using the provided screws.
3. Secure the assembled stand to the back of the monitor until it clicks into place or is firmly screwed. Refer to the Quick Guide for specific visual instructions.

4.2 Connecting to a Device

Connect your computer or console to the monitor using one of the following cables:

- **HDMI:** Use the included HDMI 2.1 cable for resolutions up to 3840x2160 at 165Hz.
- **DisplayPort:** Use the included DisplayPort 1.4 cable for optimal PC gaming performance.
- **USB Type-C:** Connect compatible devices using a USB Type-C cable that supports DisplayPort Alternate Mode.

Connect the power cord to the monitor and then to a power outlet. Press the power button to turn on the monitor.

5. OPERATING INSTRUCTIONS

5.1 On-Screen Display (OSD) Navigation

Image: Location of the 5-way Joystick Navigator on the monitor's rear.

The monitor features a 5-way joystick navigator located at the bottom center of the back of the screen for easy access to the OSD menu. Use the joystick to navigate through menu options and adjust settings.

- **Press:** Enter/Confirm selection.
- **Up/Down:** Navigate menu items.
- **Left/Right:** Adjust values or move between sub-menus.

5.2 Key Settings

- **Resolution:** Ensure your device is set to 3840x2160 (UHD) for optimal clarity.
- **Refresh Rate:** Set your device's refresh rate to 165Hz for the smoothest experience.
- **HDR:** Enable DisplayHDR True Black 400 in your system settings for enhanced contrast and color.
- **Adaptive Sync:** Activate AMD FreeSync Premium Pro or G-Sync Compatible (if applicable) in your GPU control panel to prevent screen tearing.

6. MAINTENANCE

6.1 OLED Care 2.0 Features

Your monitor is equipped with OLED Care 2.0, a suite of features designed to prevent image retention and burn-in, common concerns with OLED panels. These features operate automatically in the background or prompt you for action.

- **Pixel Shift:** Periodically shifts pixels to prevent static images from causing burn-in.
- **Panel Protect:** A pixel refresh cycle that runs after a certain period of use (e.g., 4 hours, or configurable up to 24 hours via firmware updates). This process takes approximately 6-8 minutes and the monitor will be unusable during this time. It is recommended to allow this process to complete when prompted.
- **Static Logo Detection:** Automatically dims static logos or UI elements to reduce burn-in risk.

To ensure optimal panel health, it is recommended to allow the monitor to enter standby mode when not in use, as this often triggers maintenance cycles.

6.2 Cleaning the Monitor

- Always power off the monitor and unplug the power cord before cleaning.
- Use a soft, lint-free cloth lightly dampened with water or a non-abrasive screen cleaner.
- Do not spray cleaner directly onto the screen.
- Avoid using alcohol-based cleaners, ammonia, or abrasive materials.

7. TROUBLESHOOTING

Problem	Possible Cause / Solution
No image on screen	- Ensure the power cord is securely connected and the monitor is powered on. - Verify the video cable (HDMI, DisplayPort, USB-C) is correctly connected to both the monitor and the source device. - Check if the correct input source is selected in the OSD menu.
Flickering or glitches (especially with DisplayPort)	- Try using a different DisplayPort cable, or switch to an HDMI 2.1 cable if available, as some DisplayPort 1.4 cables or setups can be problematic. - Ensure your graphics card drivers are up to date. - Disable Dynamic Refresh Rate in Windows settings if experiencing flicker on desktop.
Image retention or burn-in concerns	- Ensure OLED Care 2.0 features (Pixel Shift, Panel Protect) are active. - Allow the monitor to enter standby mode regularly to run maintenance cycles. - Avoid displaying static images for extended periods. Utilize screen savers and auto-hide taskbars. - Consider using dark mode for applications and operating systems.
No sound from monitor speakers/headphone out	- Check the volume settings on both the monitor and your source device. - Ensure the correct audio output device is selected in your computer's sound settings. - Verify the headphone cable is fully inserted into the headphone-out jack.

8. SPECIFICATIONS

Feature	Detail
Brand	msi
Model Number	MAG 321CUP QD-OLED
Screen Size	32 inches
Panel Type	QD-OLED
Resolution	3840 x 2160 (UHD)

Feature	Detail
Refresh Rate	165Hz
Response Time	0.03ms (GtG)
HDR Certification	VESA DisplayHDR True Black 400
Motion Blur Reduction	VESA ClearMR 9000
Adaptive Sync	AMD FreeSync Premium Pro, G-Sync Compatible
Connectivity	2x HDMI 2.1, 1x DisplayPort 1.4a, 1x USB Type-C (DP Alt.), 1x Headphone-out
VESA Mountable	Yes
Adjustments	Tilt
Color	Black
Item Weight	25.1 pounds
Product Dimensions (LxWxH)	9.53 x 28.27 x 19.02 inches

9. WARRANTY AND SUPPORT

The MSI MAG 321CUP QD-OLED monitor comes with a **3-Year Burn-In Warranty**, which includes coverage for OLED burn-in. This warranty provides peace of mind regarding the longevity of your display.

For technical support, warranty claims, or further assistance, please visit the official MSI support website or contact their customer service. Keep your purchase receipt and product serial number handy for faster service.

Online Resources:

- MSI Official Website: www.msi.com
- Product Support Page: (Refer to MSI's website for the specific support page for your model)