

BenQ SW271

BenQ SW271 27-inch 4K HDR Professional Monitor User Manual

Model: SW271

1. INTRODUCTION

The BenQ SW271 PhotoVue monitor is a 27-inch 4K UHD (3840x2160) professional IPS display designed for photographers and graphic designers. It features AQCOLOR technology, offering factory-calibrated 99% Adobe RGB, 100% sRGB, 100% Rec.709, and DCI-P3 color spaces for exceptional color accuracy. With 10-bit color depth and 14-bit 3D LUT hardware calibration, the SW271 ensures precise color reproduction. High Dynamic Range (HDR) support enhances contrast and detail, providing a more lifelike image. The monitor also includes a versatile USB Type-C port for simplified connectivity and data transfer, along with an ergonomic design for comfortable viewing.



Figure 1: BenQ SW271 monitor with detachable shading hood for glare reduction.

2. PACKAGE CONTENTS

Verify that all items listed below are included in your package:

- BenQ SW271 Monitor
- Monitor Stand (Base and Arm)
- Detachable Shading Hood (for landscape and portrait orientation)
- Hotkey Puck
- Power Cord
- HDMI Cable (v2.0)
- DisplayPort Cable (v1.4)
- USB 3.0 Upstream Cable
- USB Type-C Cable
- Calibration Report
- Quick Start Guide (QSG)

3. SETUP

3.1 Monitor Assembly

1. Carefully remove the monitor and stand components from the packaging.
2. Attach the monitor arm to the back of the monitor panel. Ensure it clicks securely into place.
3. Attach the monitor base to the arm. Tighten any screws as indicated in the Quick Start Guide.
4. Place the assembled monitor on a stable, flat surface.
5. Attach the shading hood by aligning it with the grooves on the monitor's edges and securing it. The hood can be used in both landscape and portrait modes.

3.2 Connecting the Monitor

Connect the monitor to your computer using the appropriate cables. The SW271 offers multiple connectivity options:

- **USB Type-C:** For single-cable transmission of video, data, and power (up to 5Gbps data transfer).
- **DisplayPort (v1.4):** For high-resolution video input.
- **HDMI (v2.0):** Two ports available for video input.
- **USB 3.0 Hub:** Connect the USB 3.0 upstream cable from your computer to the monitor to enable the monitor's downstream USB ports (2x USB 3.0).

Ensure all cables are securely connected to their respective ports on the monitor and your computer.



Figure 2: Rear view of the BenQ SW271 monitor with various input ports including HDMI, DisplayPort, USB-C, and USB 3.0.

4. KEY FEATURES

- **27-inch 4K UHD Resolution:** Delivers exceptional clarity and fine detail with a resolution of 3840x2160.
- **High Dynamic Range (HDR):** Provides sharpened brightness and incredible detail, increasing the dynamic range between black and white for a more realistic image.
- **AQCOLOR Technology:** Ensures accurate colors for photography with 99% Adobe RGB coverage, 100% sRGB, 100% Rec.709, and DCI-P3 color spaces. Each monitor is factory-calibrated for precise Delta-E and gamma performance.
- **USB Type-C Connectivity:** Simplifies your workspace by allowing video, data, and power transmission through a single cable, facilitating easy hardware calibration.
- **Hardware Calibration with Palette Master Element Software:** Allows users to tune and maintain the monitor's color performance at its most optimal state, ensuring long-term color accuracy.
- **Hotkey Puck:** Provides quick access to OSD settings and custom color modes, enhancing workflow efficiency.
- **Ergonomic Design:** Offers tilt, swivel, pivot, and height adjustments for optimal viewing comfort.



Figure 3: BenQ SW271 monitor displaying a vibrant image, showcasing its 4K UHD resolution and color accuracy.

5. OPERATING THE MONITOR

5.1 On-Screen Display (OSD) Menu

The OSD menu allows you to adjust various monitor settings. Access it using the buttons located on the bottom right bezel of the monitor. Navigate through the menu using the directional buttons and confirm selections with the 'Enter' button.

5.2 Hotkey Puck

The Hotkey Puck is a wired remote control that provides quick access to frequently used settings and color modes. It allows you to switch between custom color presets (e.g., Adobe RGB, sRGB, Black & White) without navigating through the full OSD menu. This enhances workflow efficiency, especially for tasks requiring frequent color mode changes.

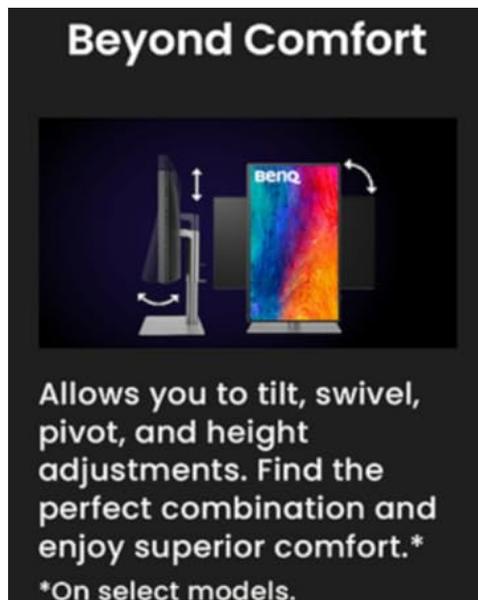


Figure 4: The Hotkey Puck allows for easy setup of favorite color modes and feature shortcuts, plus brightness and contrast adjustments.

5.3 Picture-by-Picture (PBP) and Picture-in-Picture (PIP)

The SW271 supports PBP and PIP functions, allowing you to view content from multiple sources simultaneously. This is particularly useful for comparing images in different color spaces side-by-side or for multitasking.

Video 1: Learn how to use the GamutDuo function to view content in different color spaces side-by-side on BenQ Professional Monitors.

6. HARDWARE CALIBRATION

The BenQ SW271 monitor supports hardware calibration using the Palette Master Element software. This process directly adjusts the monitor's internal processing chip, ensuring consistent and accurate color performance over time, independent of your computer's graphics card settings.

6.1 Using Palette Master Element

Download and install the latest version of Palette Master Element software from the official BenQ website. Connect a compatible colorimeter (sold separately) to your monitor and computer. Follow the on-screen instructions in the software to perform calibration. This will create a custom color profile for your monitor, ensuring optimal color accuracy for your workflow.

Video 2: An explanation from BenQ INFTY Lab on why BenQ developed its own calibration software, Palette Master Ultimate (PMU).

7. ERGONOMICS

The SW271 monitor stand offers comprehensive ergonomic adjustments to help you find the most comfortable viewing position and reduce strain during long work sessions:

- **Height Adjustment:** Raise or lower the monitor to eye level.
- **Tilt:** Adjust the screen's vertical angle (forward/backward).
- **Swivel:** Rotate the monitor horizontally (left/right).
- **Pivot:** Rotate the screen 90 degrees for portrait viewing.



Figure 5: Detailed dimensions and available ergonomic adjustments (tilt, swivel, pivot, height) for the BenQ SW271 monitor.

8. CONNECTIVITY

The BenQ SW271 provides a variety of ports for flexible connectivity with your devices:

- 2 x HDMI (v2.0)
- 1 x DisplayPort (v1.4)
- 1 x USB Type-C (with DisplayPort Alt Mode, data, and power delivery)
- 2 x USB 3.0 Downstream Ports
- 1 x USB 3.0 Upstream Port
- SD/SDHC/SDXC/MMC Card Reader
- Headphone Jack

9. MAINTENANCE

To ensure the longevity and optimal performance of your BenQ SW271 monitor, follow these maintenance guidelines:

- **Cleaning the Screen:** Gently wipe the screen with a soft, lint-free cloth. For stubborn marks, use a monitor-specific cleaning solution applied to the cloth, not directly to the screen.

- **Cleaning the Casing:** Use a soft, dry cloth to wipe the monitor casing. Avoid abrasive cleaners or solvents.
- **Ventilation:** Ensure the monitor's ventilation openings are clear and unobstructed to prevent overheating.
- **Power Off:** Always power off the monitor when not in use for extended periods.

10. TROUBLESHOOTING

If you encounter issues with your BenQ SW271 monitor, refer to the following common troubleshooting steps:

- **No Image/Power:** Check all power and signal cable connections. Ensure the monitor and computer are powered on.
- **Flickering/Distorted Image:** Verify cable connections. Adjust resolution and refresh rate settings on your computer.
- **Incorrect Colors:** Ensure the correct color mode is selected via the OSD or Hotkey Puck. Perform hardware calibration using Palette Master Element.
- **USB-C Issues:** Ensure your computer's USB-C port supports DisplayPort Alt Mode and power delivery. Update monitor firmware if necessary.
- **Buttons Unresponsive:** Check if the OSD lock function is enabled in the General settings.

For further assistance, consult the detailed user manual available on the BenQ support website or contact BenQ customer support.

11. SPECIFICATIONS

- **Screen Size:** 27 Inches
- **Screen Resolution:** 3840x2160 (4K UHD 2160p)
- **Panel Type:** IPS
- **Aspect Ratio:** 16:9
- **Color Depth:** 10-bit (1.07 billion colors)
- **Color Gamut:** 99% Adobe RGB, 100% sRGB, 100% Rec.709, DCI-P3
- **HDR Support:** Yes
- **Hardware Calibration:** Yes, with 14-bit 3D LUT
- **Connectivity:** 2x HDMI (v2.0), 1x DisplayPort (v1.4), 1x USB Type-C, 2x USB 3.0 Downstream, 1x USB 3.0 Upstream
- **Card Reader:** SD/SDHC/SDXC/MMC
- **Ergonomics:** Height, Tilt, Swivel, Pivot adjustable
- **Mounting Type:** VESA Wall Mounting (Yes)
- **Dimensions (HxWxD):** 9.37 x 24.64 x 14.65 inches (with base)
- **Item Weight:** 0.236 ounces (Note: This weight seems incorrect from the source data, typical monitor weight is much higher)
- **Color:** Black

12. WARRANTY AND SUPPORT

For detailed warranty information and technical support, please refer to the warranty card included in your product packaging or visit the official BenQ website. You can also find FAQs, driver downloads, and additional resources on their support pages.