UGREEN B0FB3RYD43

UGREEN HDMI KVM Switch 4K@60Hz Instruction Manual

1. INTRODUCTION

This manual provides detailed instructions for the UGREEN HDMI KVM Switch, designed to allow two computers to share two monitors, a single keyboard, mouse, and other USB peripherals. This device supports resolutions up to 4K@60Hz and features USB 3.0 ports for high-speed data transfer. Please read this manual carefully before use to ensure proper installation and operation.

2. PRODUCT OVERVIEW

2.1 Key Features

- **Dual Monitor, Dual Computer Control:** Manage two computers with one set of keyboard and mouse, and display output on two monitors.
- **High Resolution Support:** Supports resolutions up to 4K@60Hz, with compatibility for 8K@60Hz and 4K@240Hz via certified HDMI 2.1 cables.
- **USB 3.0 Ports:** Equipped with 4 USB 3.0 ports (3 USB-A + 1 USB-C) for sharing USB devices like flash drives, printers, and hard drives, offering data transfer speeds up to 5Gbps.
- **Multiple Switching Modes:** Supports button switching on the device and desktop controller switching for convenience.
- **Plug & Play:** No software installation or drivers required.
- **Durable Construction:** Features a robust aluminum alloy case and nickel-plated connectors.

2.2 Package Contents

- UGREEN HDMI KVM Switch
- 2 x USB-A Cables (1.5m)
- 4 x HDMI Cables (1.5m)
- 1 x Desktop Controller (1.5m)
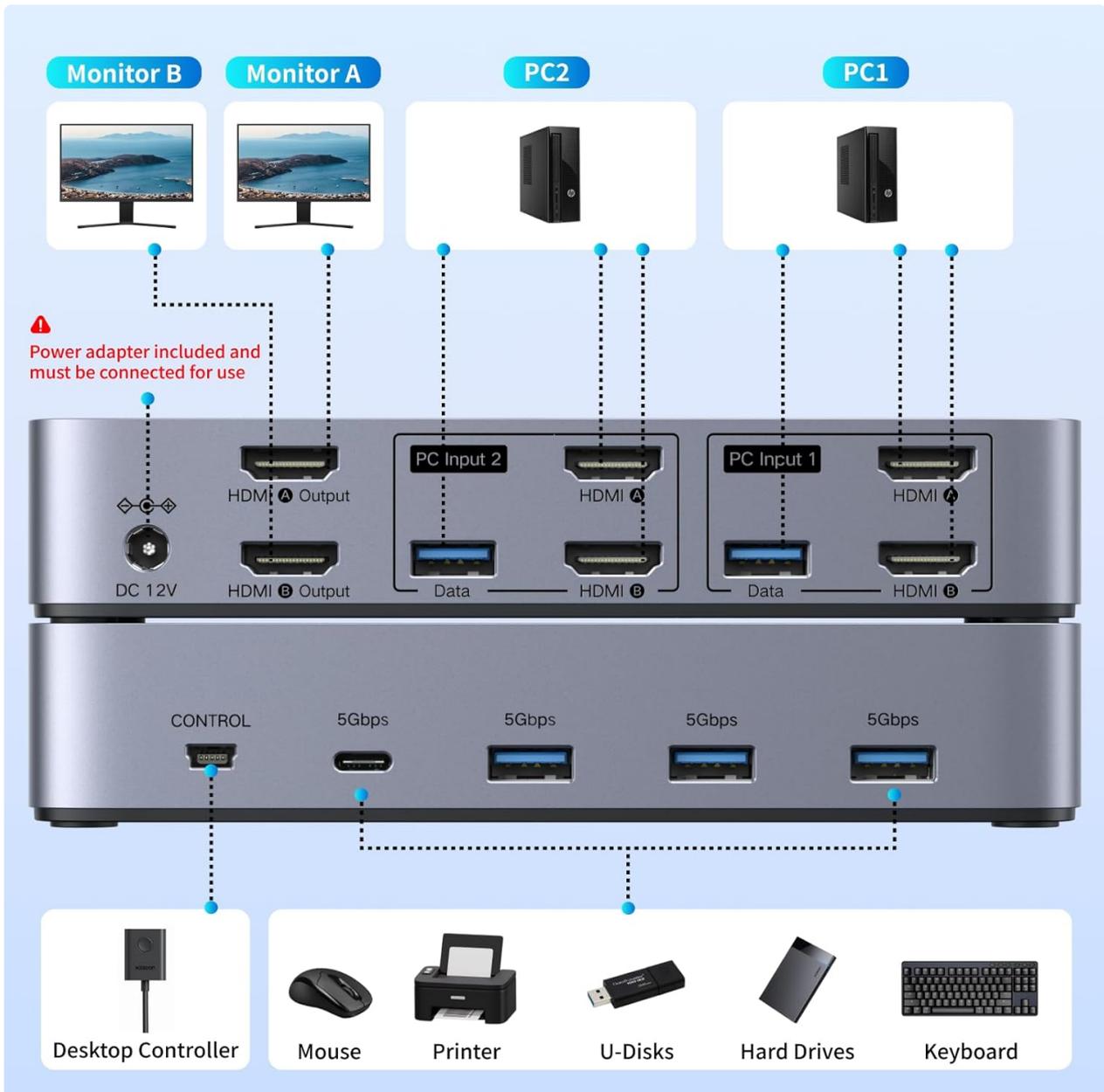- 1 x DC Power Adapter
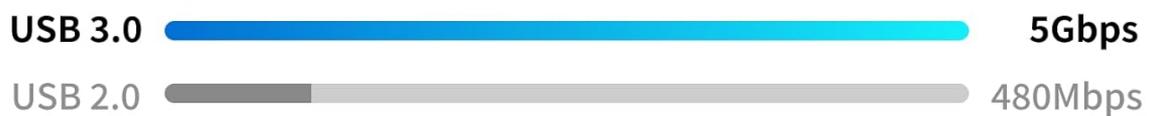
2.3 Product Diagram

Figure 1: Front and Rear Panel Connections. This diagram illustrates the input and output ports on the KVM switch, including HDMI outputs, PC inputs (HDMI A, HDMI B, Data), DC 12V power input, and USB 3.0 ports for peripherals.

4 USB 3.0 Ports for Ultra-fast Data Transfer

10X Faster Than USB 2.0

| USB 3.0 | | 5Gbps |
| USB 2.0 | | 480Mbps |

NOTE: These 4 USB ports only support data transfer, not video transfer.

Figure 2: USB 3.0 Ports for Data Transfer. This image highlights the four USB 3.0 ports (three USB-A and one USB-C) on the KVM switch, emphasizing their 5Gbps data transfer capability. Note: These USB ports support data transfer only, not video transfer.

3. SETUP INSTRUCTIONS

Follow these steps to connect your UGREEN HDMI KVM Switch:

1. **Power Connection:** Connect the provided DC 12V power adapter to the KVM switch and then to a power outlet. The KVM switch requires external power to function correctly.

Figure 3: Power Adapter Installation Method. Align the plug, install it, and rotate clockwise to secure.

2. **Monitor Connections:** Connect your two monitors to the HDMI Output ports (HDMI Output A and HDMI Output B) on the KVM switch using HDMI cables.

3. **Computer Connections (PC1 & PC2):** For each computer (PC1 and PC2), you must connect:

   - Two HDMI cables from the computer's HDMI output ports to the corresponding HDMI Input ports (HDMI A and HDMI B) on the KVM switch.

   - One USB-A cable from the computer's USB port to the corresponding Data port on the KVM switch.

   Important: Each computer must connect 2 HDMI cables + 1 USB-A cable to ensure proper functionality for dual monitor and peripheral sharing.

4. **Peripheral Connections:** Connect your keyboard, mouse, and other USB devices (e.g., USB flash drives, printers, hard drives) to the USB 3.0 ports on the KVM switch.

5. **Desktop Controller (Optional):** Connect the desktop controller to the 'CONTROL' port on the KVM switch for remote switching.
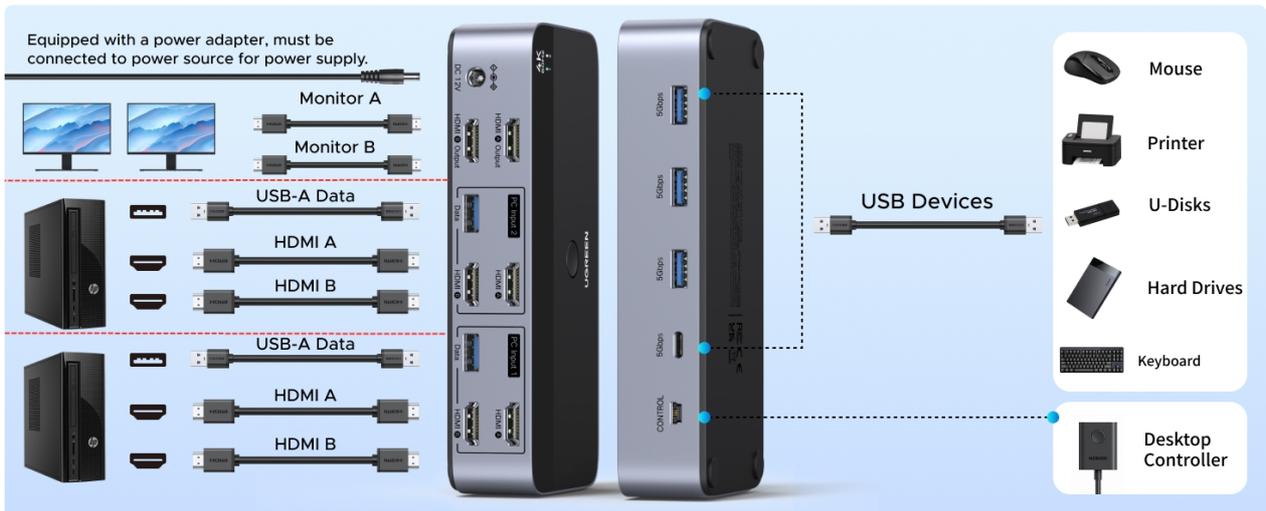

Figure 4: Comprehensive Connection Diagram. This diagram illustrates how to connect two computers, two monitors, and various USB peripherals to the KVM switch.

3.1 Compatibility Notes

- This is an **HDMI KVM switch**, not a DisplayPort KVM switch or a USB-C KVM switch. DisplayPort is not supported directly.

- To function properly, a computer must simultaneously output two HDMI signals and one USB-A signal.

- If your computer outputs HDMI, DP, or USB-C, please read the following carefully:

- If your desktop outputs two HDMI signals, you can connect it directly to this switch to output two screens.
- If your desktop has only one HDMI or DP output, this switch is not suitable. A single-port computer connected to this switch can only display on one monitor.
- If your desktop has HDMI and DP port, or two DP ports, this switch does not support direct connection to the DP port. One or two DP to HDMI converters are required.
- If your laptop (Windows system) outputs HDMI and USB-C (video), you will need to prepare a USB-C to HDMI cable, at the same time the HDMI port and USB-A port must be connected to this switch for proper operation.
- If your laptop (Windows system) has two USB-C (video) ports, you'll need to prepare two USB-C to HDMI adapters and the USB-A port also need to be connected. If your laptop doesn't have a USB-A port, you'll need a USB-C to UAB-A OTG adapter and connect both ports to the switch for proper operation.
- If your laptops (Windows system) has only one USB-C video output port, you will need to add a USB-C docking station that supports two HDMI ports for simultaneous output video (MST).
- When the laptop is a MacBook Air M1/M2/M3 (macOS system), it only supports one screen output and is not suitable for this product.
- When the laptop is a MacBook Pro/Max M1/M2/M3/M4 (macOS system), you need to prepare two USB-C to HDMI converters or a USB-C Hub with 2 HDMI ports, and this Hub supports simultaneous video output from two HDMI ports (SST mode). If your laptop does not have a USB-A port, you need to add a USB-C to USB-A OTG Adapter and connect it to this product for normal use.

Figure 5: Important Compatibility and Connection Notes. This image provides crucial information regarding various computer setups and necessary adapters for proper functionality with the KVM switch.

4. OPERATING INSTRUCTIONS

4.1 Switching Between Computers

The UGREEN HDMI KVM Switch offers two methods for switching between connected computers:

1. **Button Switch:** Press the physical button on the top of the KVM switch to toggle between PC1 and PC2.
2. **Desktop Controller:** Use the external desktop controller to switch between computers. This allows for more flexible placement of the KVM switch.

Note: Keyboard shortcuts (hotkeys) are not supported for switching with this device.

Resolution and HDMI Wire Gauge

Included Wire
- 2*USB-A Cable (1.5m)
- 4*HDMI Cable (1.5m)
- 1*Desktop Controller (1.5m)
- 1* DC Power Adapter

Resolution	Input Cable Length	Output Cable Length	Wire Gauge
4K@60Hz	≤3m	≤3m	28AWG
4K@30Hz	≤10m	≤10m	26AWG
1080P@60Hz	≤15m	≤15m	24AWG

Figure 6: Switching Methods. This image demonstrates both the button switch on the KVM unit and the external desktop controller for changing inputs.

4.2 Display Modes

The KVM switch supports both Mirror Mode and Extend Mode for your dual monitor setup:

- **Mirror Mode:** Both monitors display the same content.
- **Extend Mode:** The desktop is extended across both monitors, providing more screen real estate.

The display mode is configured through your computer's operating system display settings.

Figure 7: Mirror Mode vs. Extend Mode. This image visually compares the two common dual monitor display configurations.

5. MAINTENANCE

To ensure the longevity and optimal performance of your UGREEN HDMI KVM Switch, please follow these maintenance guidelines:

- **Cleaning:** Use a soft, dry cloth to clean the device. Avoid using liquid cleaners or aerosols, which may damage the unit.
- **Storage:** Store the KVM switch in a cool, dry place away from direct sunlight and extreme temperatures.
- **Handling:** Avoid dropping or subjecting the device to strong impacts. Do not attempt to disassemble or modify the KVM switch, as this will void the warranty and may cause damage.
- **Cable Management:** Ensure cables are not excessively bent or tangled to prevent damage to the connectors and internal wiring.

6. TROUBLESHOOTING

If you encounter issues with your UGREEN HDMI KVM Switch, please refer to the following common problems and solutions:

6.1 No Display or Intermittent Signal

- **Check Connections:** Ensure all HDMI and USB cables are securely connected to both the KVM switch and your computers/monitors. Verify that each computer has two HDMI cables and one USB-A cable connected to the KVM switch.

- **Power Supply:** Confirm the DC 12V power adapter is correctly connected to the KVM switch and a working power outlet. The KVM switch requires external power.
- **Resolution Compatibility:** Ensure your monitors and computers support the output resolution (e.g., 4K@60Hz). If you need 4K@60Hz, make sure your HDMI cables, computer, and monitor all support this resolution.
- **Cable Quality:** Use high-quality HDMI 2.1 certified cables, especially for higher resolutions like 8K@60Hz or 4K@240Hz.
- **Restart Devices:** Try restarting the KVM switch, computers, and monitors.

6.2 Keyboard or Mouse Not Responding

- **USB Connections:** Ensure the USB-A data cables from your computers are connected to the KVM switch's Data ports, and your keyboard/mouse are connected to the KVM's USB 3.0 ports.
- **Power Cycle:** Disconnect and reconnect the KVM switch's power adapter, then reconnect your keyboard and mouse.
- **Direct Connection Test:** Temporarily connect your keyboard and mouse directly to the computer to verify they are functioning correctly.

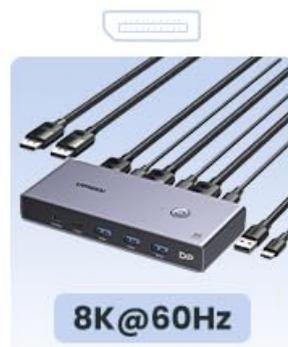## 6.3 Incorrect Connection Examples

Figure 8: Correct vs. Wrong Connection. The left image shows the correct setup with all necessary cables connected for each PC, while the right image highlights common incorrect connections (e.g., missing HDMI or USB cables).

6.4 General Points to Note

- Ensure each of your computers can support dual-screen displaying simultaneously.
- Before purchasing, test your computer to 2 monitors directly to verify dual monitor output.
- Confirm your device interface before purchasing; this is an HDMI KVM Switch 2 Monitors 2 Computers, only supports 2 inputs 2 outputs. It is NOT a DP KVM switch.
- The two monitors can only output the video source from one computer, and cannot output the signal source of PC1 and PC2 at the same time.
- To ensure normal usage, connect the power supply via the power adapter.
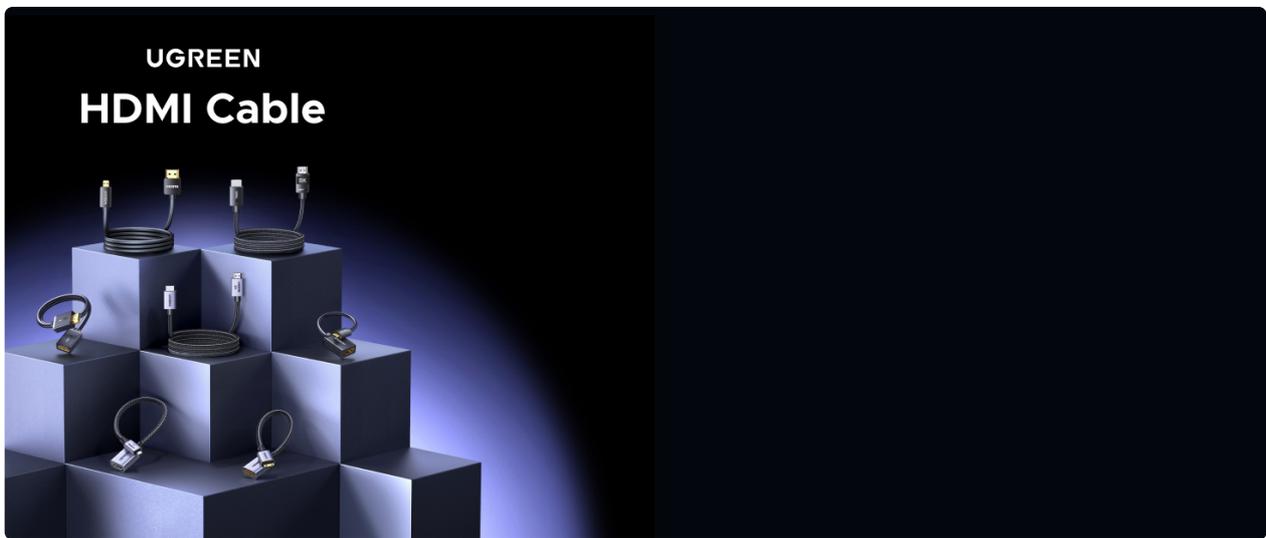- Keyboard shortcuts (hotkeys) toggles are not supported.

Figure 9: Key Considerations for KVM Switch Operation. This image summarizes important requirements and limitations for the KVM switch, including dual-screen support, connection types, and power needs.

7. SPECIFICATIONS

Feature	Specification
Brand	UGREEN
Model	B0FB3RYD43
Operation Mode	Manual
Connector Type	HDMI, USB Type C, USB Type A
Circuit Type	2-way
Number of Positions	2 (for computers)
Control Method	Push Button, Desktop Controller
USB Ports	4 x USB 3.0 (3 USB-A, 1 USB-C)
Data Transfer Speed	Up to 5Gbps (USB 3.0)
Max Resolution	4K@60Hz (supports 8K@60Hz, 4K@240Hz with HDMI 2.1 certified cables)
Compatible Devices	Computers, Nintendo Switch, PS5/PS4/PS4 Pro, Xbox One, TV Box, Blu-ray player
Material	Aluminum (case), Nickel (contact material)

7.1 Resolution and HDMI Cable Requirements

Resolution	Input Cable Length	Output Cable Length	Wire Gauge
4K@60Hz	≤ 3m	≤ 3m	28AWG
4K@30Hz	≤ 10m	≤ 10m	26AWG
1080P@60Hz	≤ 15m	≤ 15m	24AWG

8. Warranty and Support

Specific warranty information is typically provided with your product packaging or on the manufacturer's official website. For technical support, troubleshooting assistance, or warranty claims, please refer to the contact information provided by UGREEN in your product documentation or visit the official UGREEN support website.