

## UGREEN AK500

# UGREEN HDMI KVM Switch User Manual

Model: AK500

## 1. INTRODUCTION

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The UGREEN HDMI KVM Switch is designed to enhance your productivity by allowing two computers to share two monitors, a single keyboard, mouse, and other USB peripherals. This device supports high-resolution video output up to 4K@60Hz and provides ultra-fast USB 3.0 data transfer speeds. It's a versatile solution for managing multiple systems in a clean and efficient workspace.

## 2. PACKAGE CONTENTS

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Please verify that all items listed below are included in your package:

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

# Included Components



① 1\*HDMI KVM Switch



② 2\*USB-A Cable (1.5m)



③ 4\*HDMI Cable (1.5m)



④ 1\*Desktop Controller (1.5m)



⑤ 1\* DC Power Adapter



⑥ 1\* User Manual

Figure 2.1: Included Components and their dimensions.

The image above displays the KVM switch along with all the cables and accessories provided in the box, including the power adapter, HDMI cables, USB cables, and the desktop controller, ensuring you have everything needed for setup.

## 3. PRODUCT OVERVIEW

Familiarize yourself with the ports and indicators on your UGREEN HDMI KVM Switch.

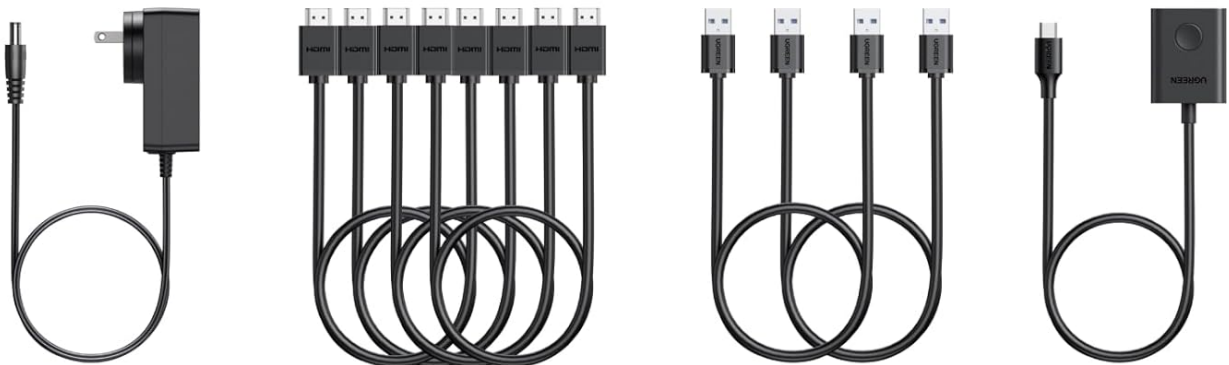


Figure 3.1: Front and Rear Panel Layout.

This image shows the KVM switch from both the front and rear, highlighting all connection points. The front panel features USB 3.0 ports for peripherals and a control port for the desktop switch. The rear panel includes DC 12V power input, HDMI outputs for monitors, and dedicated HDMI and USB data inputs for two PCs.

## Front Panel

- **Control Port:** Connects to the wired desktop controller for switching.
- **USB 3.0 Ports (3 x USB-A, 1 x USB-C):** For connecting shared USB devices such as keyboards, mice, printers, and USB flash drives. These ports support data transfer speeds up to 5Gbps.



## 4 USB 3.0 Ports for Ultra-fast Data Transfer

**10X** Faster Than USB 2.0

USB Type	Speed
USB 3.0	5Gbps
USB 2.0	480Mbps

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

Figure 3.2: USB 3.0 Ports for Ultra-fast Data Transfer.

The close-up view of the front panel emphasizes the four USB 3.0 ports, demonstrating their capability for high-speed data transfer, which is 10 times faster than USB 2.0.

### Rear Panel

- **DC 12V:** Power input port.
- **HDMI Output (A & B):** Connects to your two monitors.
- **PC Input 1 (HDMI A, HDMI B, Data):** Connects to the first computer for video and USB data.
- **PC Input 2 (HDMI A, HDMI B, Data):** Connects to the second computer for video and USB data.

## 4. SETUP INSTRUCTIONS

Follow these steps to properly set up your UGREEN HDMI KVM Switch:

1. **Power Connection:** Connect the provided DC power adapter to the 'DC 12V' port on the KVM switch and plug it

into a power outlet. Ensure the power adapter is securely connected for proper operation.

2. **Connect Monitors:** Connect your two monitors to the 'HDMI Output A' and 'HDMI Output B' ports on the KVM switch using HDMI cables.
3. **Connect Computer 1 (PC1):**
  - Connect two HDMI cables from PC1's HDMI output ports to the 'HDMI A' and 'HDMI B' input ports under 'PC Input 1' on the KVM switch.
  - Connect one USB-A cable from PC1's USB-A port to the 'Data' port under 'PC Input 1' on the KVM switch.
4. **Connect Computer 2 (PC2):**
  - Connect two HDMI cables from PC2's HDMI output ports to the 'HDMI A' and 'HDMI B' input ports under 'PC Input 2' on the KVM switch.
  - Connect one USB-A cable from PC2's USB-A port to the 'Data' port under 'PC Input 2' on the KVM switch.
5. **Connect Peripherals:** Connect your keyboard, mouse, printer, USB flash drives, or other USB devices to the USB 3.0 ports on the front panel of the KVM switch.
6. **Connect Desktop Controller:** Plug the wired desktop controller into the 'Control' port on the front panel of the KVM switch.

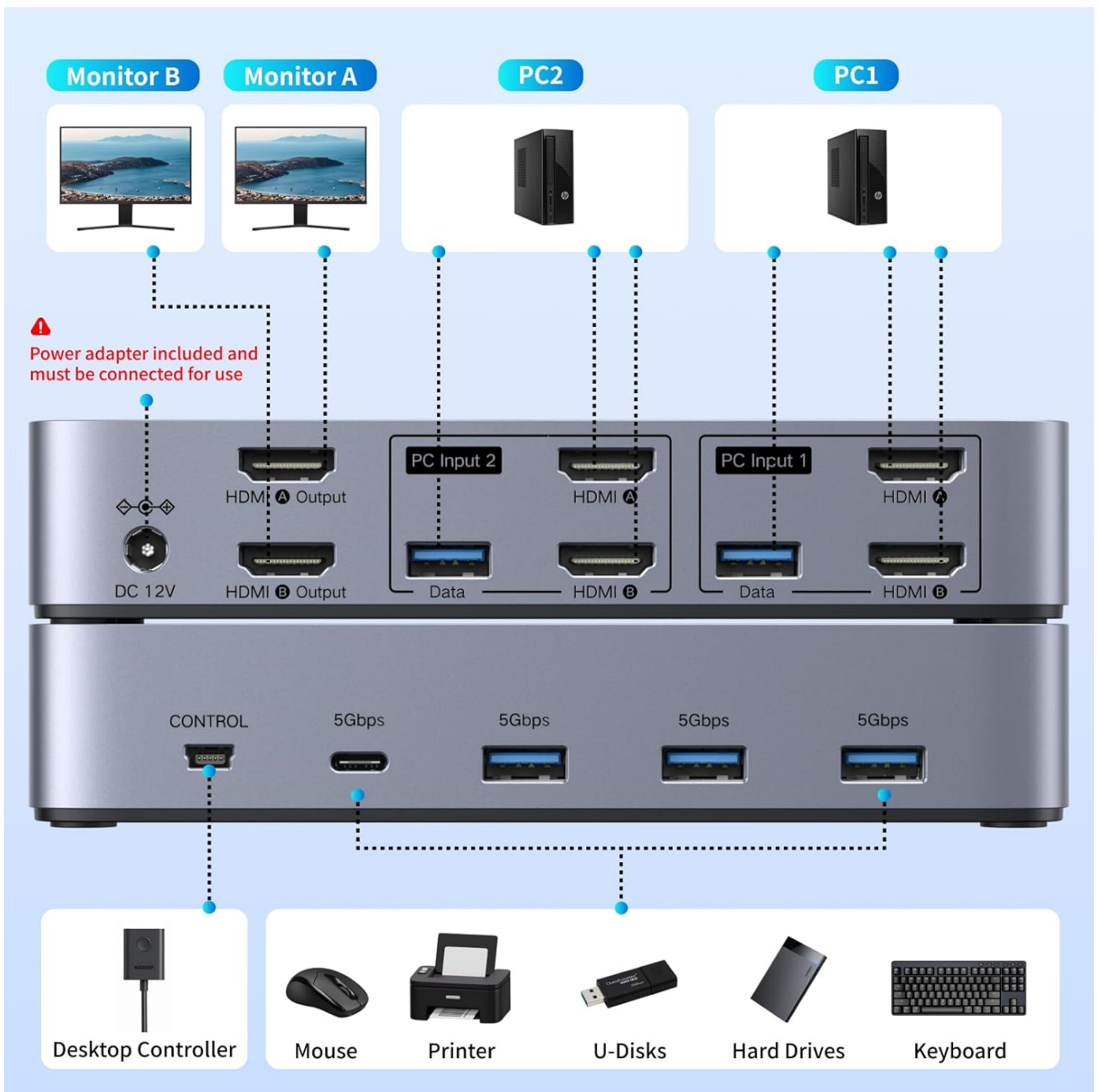


Figure 4.1: KVM Switch Connection Diagram.

This diagram illustrates the complete connection setup, showing how two PCs, two monitors, and various USB peripherals are connected to the KVM switch. It highlights the importance of connecting the power adapter.



- ① The product must be connected to a 12V 2A power adapter to function properly. Please make sure to connect the power adapter.
- ② Two HDMI cables and one USB-A cable must be connected between the product and each host simultaneously for proper operation.
- ③ NOT support Automatic Switching and hotkey switching.
- ④ Please check whether the computer wakes up from sleep mode before switching.

Figure 4.2: Power Adapter Installation Method.

The image above provides a step-by-step guide for installing the power adapter, ensuring a secure and correct connection to the KVM switch.

## 5. OPERATING INSTRUCTIONS

Once all connections are made, you can begin using your KVM switch.

### Switching Between Computers

The UGREEN KVM switch offers two convenient methods for switching between connected computers:

- **Button Switch:** Press the button located on the top of the KVM switch to toggle between PC1 and PC2.
- **Desktop Controller:** Use the wired desktop controller to switch between PC1 and PC2. This allows you to place the KVM switch out of sight while keeping the switching function easily accessible.

# Two Switching Methods

## Button Switch



## Desktop Control



Figure 5.1: Two Switching Methods.

This image visually demonstrates both the direct button on the KVM switch and the external desktop controller as methods for switching between the connected computers.

## Display Modes

The KVM switch supports both Mirror Mode and Extend Mode for your dual monitor setup, depending on your computer's display settings.

- **Mirror Mode:** Displays the same content on both connected monitors.
- **Extend Mode:** Extends your desktop across both connected monitors, providing more screen real estate.



Figure 5.2: Mirror Mode and Extend Mode.

The image above illustrates the difference between Mirror Mode, where both screens show identical content, and Extend Mode, where the desktop is expanded across two screens.

## 6. MAINTENANCE

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

- **Cleaning:** Use a soft, dry cloth to clean the exterior of the device. Avoid using abrasive cleaners, solvents, or strong chemicals, as they may damage the surface.
- **Storage:** When not in use for extended periods, store the KVM switch in a cool, dry place away from direct sunlight and extreme temperatures.
- **Cable Management:** Ensure cables are not excessively bent or tangled to prevent damage to the connectors and internal wires.
- **Ventilation:** Do not block the ventilation openings on the device to prevent overheating.

## 7. TROUBLESHOOTING

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

- **No Display or Incorrect Resolution:**

- Ensure each of your computers can support dual-screen displaying at the same time. Before purchasing, it is recommended to test your computer by connecting it directly to 2 monitors to verify dual monitor output.
- Verify that all HDMI cables are securely connected to both the KVM switch and your computers/monitors.
- Confirm that the resolution of your input devices (computers) and output devices (monitors) is consistent and supported by the KVM switch (up to 4K@60Hz).
- Ensure you are using high-quality HDMI cables that support 4K@60Hz if you intend to output at that resolution.

- **USB Devices Not Working:**

- Each computer must connect 2 HDMI cables + 1 USB-A cable to the KVM switch to ensure the keyboard, mouse, and dual monitors function correctly.
- Ensure the USB-A data cables from your computers are properly connected to the 'Data' ports on the KVM switch.
- Try connecting the USB device directly to the computer to confirm it is functional.

- **Switching Issues:**

- Ensure the power supply is connected via the power adapter for normal usage.
- Check if the computer wakes up from sleep mode before attempting to switch.
- Note that this KVM switch does not support Keyboard shortcuts (hotkeys) toggles.

- **Monitors Displaying Incorrect Source:**

- The two monitors can only output the video source from one computer at a time. They cannot output the signal source of PC1 and PC2 simultaneously.

- **Compatibility:**

- This is an HDMI KVM Switch 2 Monitors 2 Computers, supporting 2 inputs and 2 outputs. It is NOT a DisplayPort (DP) KVM switch.
- Ensure your computer has 2 HDMI ports + 1 USB-A port for full functionality with this KVM switch.



Figure 7.1: Correct vs. Wrong Connection.

This image highlights the correct way to connect your PCs to the KVM switch, emphasizing that each host must be connected with two HDMI cables and one USB cable for proper operation, and showing common incorrect connection scenarios.

## 8. SPECIFICATIONS

Feature	Specification
Model Number	AK500
Product Dimensions	6.18 x 2.83 x 1.18 inches
Weight	2.67 Pounds
Operation Mode	ON-OFF
Current Rating	2 Amps
Operating Voltage	12 Volts (DC)
Connector Type	Plug In
Contact Type	Normally Open
Terminal	HDMI
Circuit Type	2-way
Actuator Type	Push Button
Video Resolution	Up to 4K@60Hz (also supports 4K@30Hz, 1080p)
USB Ports	4 x USB 3.0 (3 USB-A, 1 USB-C)
USB Data Transfer Speed	Up to 5Gbps
HDMI Standard	HDMI 2.0, HDCP2.2/1.4, 3D, HDR, HDR10+
Supported Systems	Windows, MacOS, Linux

# High Resolution 4K@60Hz Output



Figure 8.1: High Resolution 4K@60Hz Output.

This image demonstrates the KVM switch's capability to deliver high-resolution video output, specifically 4K at 60Hz, for a clear and vibrant display.

## 9. WARRANTY AND SUPPORT

UGREEN products are designed and manufactured to the highest quality standards. In the unlikely event of a problem with your product, please contact UGREEN customer support for assistance. Information regarding warranty coverage and support channels can typically be found on the official UGREEN website or through your purchase platform.