# VLKV-DP21

DisplayPort 2x1 KVM Switcher


# User Manual

**VER 1.02**

## Thank you for purchasing this product

Please read these instructions carefully for optimum performance and safety before connecting, operating, or adjusting this product. Please keep this manual for future reference.

## A Surge protection device recommended

This product contains sensitive electrical components that electrical spikes may damage, surges, electric shocks, lightning strikes, etc. The use of surge protection systems is highly recommended to protect and extend the life of your equipment.

## Table of Contents

# 1. Introduction

This video switcher can switch 2 DP input device signals (such as PC, laptop, Mac) to 1 DP display device (such as TV, projector, LED display) and realize2 signal source devices to share 1 display device. It supports video resolutionup to 4K2K@60Hz 4:4:4. The product is designed with 2 USB2.0 input ports and 4 USB (2xUSB2.0, 2xUSB1.1) output ports, so that you can not only operate 2 source devices with keyboard and mouse but also can share U disk and printer, which is widely used in various offices.

# 2. Features

☆ DP 1.4 and HDCP 2.2 / 1.x compliant
☆ Video resolution up to 4K2K@60Hz 4:4:4
☆ Supports 32.4Gbps video bandwidth
☆ Supports HDR, HDR10, HDR10+, Dolby Vision HLG pass-through
☆ Supports DP audio pass-through up to 7.1CH HD audio (LPCM, Dolby TrueHD, and DTS-HD Master Audio)
☆ Supports 2 *(DP +USB2.0) inputs and 1*DP+ 4*USB (2* USB2.0+ 2*USB1.1) outputs
☆ Supports input auto switching
☆ Adaptive EDID, able to adapt to a variety of complex application environment
☆ Both DP and USB input and output support hot swap
☆ Controls via front panel button/hot-key/mouse
☆ Simple to install, plug and play

# 3. Package Contents

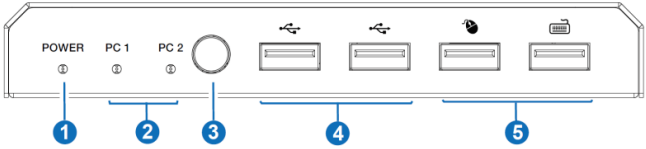
① 1 × Display Port 2X1 KVM Switcher
② 1 × 5V/2A Power Adapter
③ 2 × USB Cable (1.5 meters)
④ 1 × User Manual

# 4. Specifications

| | |
|---|---|
| **Technical** | |
| DP Compliance | DP 1.4 |
| HDCP Compliance | HDCP 2.2 / 1.x |
| Video Bandwidth | 32.4Gbps |
| Video Resolution | 4K2K@60Hz 4:4:4 |
| Color Space | RGB 4:4:4, YCbCr 4:4:4 / 4:2:2 / 4:2:0 |
| Color Depth | 8-bit, 10-bit, 12-bit (1080p@60Hz)<br>8-bit (4K2K@60Hz YUV4:4:4)<br>8-bit, 10-bit, 12-bit (4K2K@60Hz YCbCr 4:2:2 / 4:2:0) |
| DP Audio Formats | PCM 7.1CH, Dolby TrueHD and DTS-HD Master Audio |
| HDR | HDR, HDR 10, HDR 10+, and Dolby vision |
| USB Version | USB2.0 (Data transfer rate up to 480MB/S) |
| ESD Protection | Human-body Model: ±8kV (Air-gap discharge),<br>±4kV (Contact discharge) |
| **Connection** | |
| Input | 2 x DP [Female]<br>2 x USB [Type B] |
| Output | 1 x DP [Female]<br>4 x USB [Type A] |
| **Mechanical** | |
| Housing | Metal Enclosure |
| Color | Black |
| Dimensions | 142mm(W) × 82mm(D) × 21mm(H) |
| Weight | 300g |
| Power Supply | Input: DC 5V/2A. Support DC5-12V wide voltage power supply; Output with overcurrent protection function |
| Power Consumption | 1.5W (Max) |
| Operating Temperature | 0°C ~ 40°C / 32°F ~ 104°F |
| Storage Temperature | -20°C ~ 60°C / -4°F ~ 140°F |
| Relative Humidity | 20 - 90% RH (Non-Condensation) |

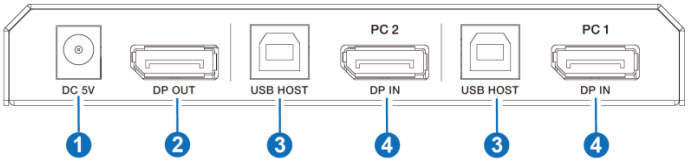
# 5. Operation Controls and Functions

## 5.1 Front Panel




| No. | Name | Function Description |
|---|---|---|
| 1 | POWER LED | When the product is powered on, a red LED will be on. |
| 2 | PC 1/2 LED | Input status indicators. When the input source is selected,the corresponding PC 1/2 LED will be on. |
| 3 | Signal source selection button | Press the button to select the input signal source, and the corresponding PC 1/2 LED will be on.<br>**Note:** 1. HDMI and USB ports are binding, so only one input source can be selected.<br>2. The default setting is an auto switch; for example, when you unplug the current selected PC1, it will switch to PC2 automatically. |
| 4 | USB2.0 ports | Connect to a U disk or other standard USB2.0 devices. |
| 5 | USB1.1 ports | Connect to mouse or keyboard for KVM control.<br>▪ Mouse operation:<br>1. Slide the mouse beyond the upper and left interface of the screen to select the last input port.<br>2. Slide the mouse beyond the bottom and the proper interfaceof the screen to determine the next input port.<br>**Note:** The mouse operation function is turned off by default. Pressing "*+s" on the keyboard can turn on edge detection (mouse sliding switch function); Pressing "*+1/2/3/4" can turn off edge detection.<br>▪ The keyboard hotkeys are as follows:<br>1. Scroll Lock+ Scroll Lock + 1/2/3/4: switch ports.<br>Ctrl + Ctrl + 1/2/3/4: switch ports.<br>Two switching hotkey methods can coexist.<br>2. Scroll Lock + Scroll Lock + i + 5~999 seconds + enter: Scanning time setting.<br>3. Scroll Lock + Scroll Lock + s: start auto scanning; Pressing any key on the keyboard will cancel the auto scanning function. |

## 5.2 Rear Panel




| No. | Name | Function Description |
|---|---|---|
| 1 | DC 5V | DC 5-12V power input port. |
| 2 | DP OUT | DP signal output port. Connect to display device with DP cable. |
| 3 | USB HOST | USB signal input port. Connect to PC with USB cable. |
| 4 | DP IN | DP signal input port. Connect to source device with DP cable. |

# 6. Application Example