

# AV Access 8KSW21DP Dual Monitor DP KVM Switcher User Manual

Home » AV Access » AV Access 8KSW21DP Dual Monitor DP KVM Switcher User Manual



### AV Access 8KSW21DP Dual Monitor DP KVM Switcher User Manual



### **Contents**

- 1 Introduction
- 2 Features
- **3 Package Contents**
- 4 Panel
- **5 Application**
- 6 Control of the Switcher
- **7 IR Remote Control**
- **8 Hotkey Function**
- 9 Specifications
- 10 Warranty
- 11 Documents /

Resources

- 11.1 References
- **12 Related Posts**

### Introduction

#### Overview

8KSW21DP-DM is a 2×1 DP 1.4a KVM Switcher with dual-channel switching and hotkey switching. It supports latest DP 1.4a and HDCP 2.2 compatibility, and supports resolutions up to 8K and can also transmit USB 3.0 signal up to 5Gbps for KVM function. It can share two monitors and USB devices between two PCs.

The switcher features virtual interaction function, and automatically wake-up the connected PC in standby mode, which can reduce the switching time. It also supports direct switching through buttons on front panel, IR remote and hotkey through keyboard connected to the specialUSB 1.1 port. It provides a wide compatibility choice for different operating systems, such as Windows, Mac OS and Linux, no driver required and simple plug and play.

#### **Features**

#### • 2 in 1 dual-channel KVM switcher:

- Each input group support two independent DP input channels, which can be connected to two DP output ports of the PC and extended to two external monitors.
- Each monitor has independent channel, which can support different resolution.
- Supports 8K resolution and high refresh rate supports the standards of

DP 1.4a HBR3, and supports the following resolutions:

- 。8K@30Hz
- · 4K@120Hz/60Hz
- 3440×1440@144Hz/120Hz/60Hz (UWQHD)
- 2560×1440@165Hz/144Hz/120Hz/60Hz
- 1080P@240Hz/165Hz/144Hz/120Hz/60Hz
- Supports 1.5m input cable and 3m output cable.

Note: please use the cables certified by DP 2.0 and DP1.4a.

### • Supports multiple DP features:

- MST Supports DP MST, each DP port can be connected with multiple DP monitors.
- HDR Supports all HDR formats.
- VRR Supports VRR variable refresh rate

### • Multiple Peripherals interfaces:

- Three super high-speed USB 3.0 ports.
- One USB 2.0 port and one USB 1.1 port for keypad.
- Provides independent mic input and audio output (3.5mm earphone) ports.
- Supports USB 3.0 data transmission with the speed up to 5Gbps.
- Supports new generation PC automatic wake-up function automatically wake up the PC in standby mode when switching.
- Fast switching time of 2-3s, based on the virtual interaction function.
- New compatibility Hotkey design fully pass-through mode and newly upgraded hotkey algorithm:
  - All key values are passed-through and compatible with various types of keyboards on the market.
  - Specially optimized hotkey algorithm for complex gaming keyboards and macro defined keyboards.
- Supports multiple control options, including IR, front panel button andhotkey switch.
- Provides four high grade DP 1.4a cables, which can support transmitting 8K signals, and provides two USB 3.0 cables, which can support transmitting 5Gbps signals.

### **Package Contents**

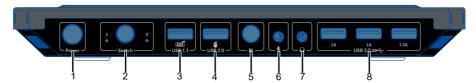
#### Before you start the installation of the product, please check the package contents:

- Switcher x 1
- Power Adapter (DC 12V 2A) x 1

- IR Remote x 1
- USB 3.0 Type-A to Type-B Cable x 2
- DP 1.4a Cable x 4
- User Manual x 1

### **Panel**

# **Front Panel**



| No. | Name                      | Description  |
|-----|---------------------------|--|
| 1   | Power Button              | Press to power on/off the device. When thedevice is powered on, the backli ght of the button will light blue.  |
| 2   | Switch Button and LED 1&2 | Press to select input group between DP In 1A/1B and DP In 2A/2B.LED 1& 2:  On: Select DP In 1A and 1B or DP In 2A and 2B as input sources.  Off: The corresponding DP Inputs are notselected.  |
| 3   | USB 1.1                   | USB 1.1 type-A port, can be used to connect to a USB keyboard for hotkey function. (Detail information, please refer to "Hotkey Function" section)  Note: It is specialized for connecting keyboard and not recommended to connect to other USB slave devices. |
| 4   | USB 2.0                   | USB 2.0 type-A port. Connect to a USB device such as a mouse.  |
| 5   | IR                        | IR receiving window. Receive IR signals.   |
| 6   | MIC In                    | Connect to a Microphone. The Microphonefollows the USB Host port select ed.  |
| 7   | Line Out                  | Connect to an earphone. The earphone followsthe USB Host port selected.  |
| 8   | USB 3.0                   | USB 3.0 type-A ports, can be used to connect to USB 3.0 high-speed devic e for KVM function.  Note: With one high power port of 5V 1.5Asupported, it can be used for connecting USB devices with high power, such as connecting a USB Came ra.                 |

### **Rear Panel**



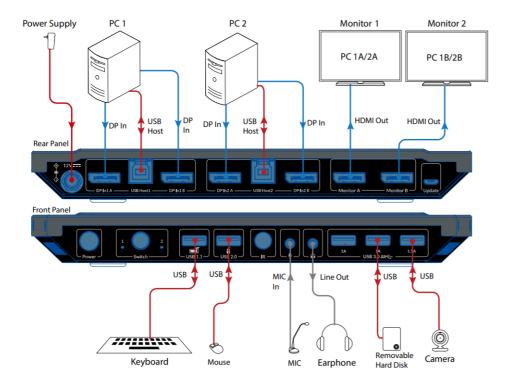
| No. | Name          | Description   |
|-----|---------------|---|
| 1   | DC 12V        | Connect to the power adapter provided.  |
| 2&4 | DP In 1A & 1B | Connect to two DP output ports of PC respectively. DP In 1A and DP In 1 B can be seen as a group, hereinafter referred to as group 1 inthis manu al.                                  |
| 3   | USB Host 1    | Connect to a host device. USB Host 1 is bound with group 1. When select group 1 as sources to input, the USB devices can be connected to thehost PC connected to USB Host 1 port.     |
| 5&7 | DP In 2A & 2B | Connect to two DP output ports of PC respectively. DP In 2A and DP In 2 B can be seen as a group, hereinafter referred to as group 2 inthis manu al.                                  |
| 6   | USB Host 2    | Connect to a host device. USB Host 2 is bound with group 2. When select group 2 as sources to input, the USB devices can be connected to thehost PC connected to the USB Host 2 port. |
| 8   | Monitor A & B | Connect to DP displays.   |
| 9   | Update        | Micro USB, for firmware upgrade.  |

## **Application**

### Warnings:

- Before wiring, disconnect the power from all devices.
- During wiring, connect and disconnect the cables gently.
   When switch input source to group 1 or group 2:
- The connected USB devices, microphone and earphone can be connected to Host PC 1 or 2.
- When switch to group 1, the display connected to Monitor A and Monitor B will output video from DP In 1A and DP In 1B respectively.

When switch to group 2, the display connected to Monitor A and Monitor B will output video from DP In 2A and DP In 2B respectively.



### Control of the Switcher

You can choose to switch input sources at your convenience through front panel button, IR remote or Hotkey function.

### **Front Panel Control**

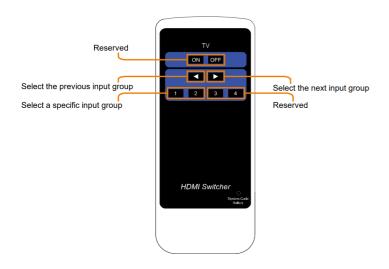
Users can choose to use front panel button to do basic switching operations. Connect the switcher as required and power on all the attached devices.



### **IR Remote Control**

The included remote handset can be used to turn on and off CEC-enabled display device and to switch two input groups to one display device.

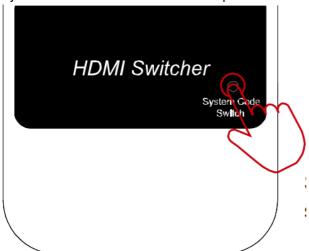
Point the remote handset directly at the IR windows on front panel.



| Button | IR Codes | Description                                      |
|--------|----------|--|
| ON     | 0x1D     | Reserved.  |
| OFF    | 0x1F     | Reserved.  |
|        | 0x1B     | Switch to the previous input group (Cycle 2->1). |
|        | 0x11     | Switch to the next input group (Cycle 1->2).     |
| 1      | 0x17     | Switch to input group 1.                         |
| 2      | 0x12     | Switch to input group 2.                         |
| 3      | 0x59     | Reserved.  |
| 4      | 0x08     | Reserved.  |

### **System Code Switch**

The IR Remote provided with the switcher is shipped in "00" IR system code. In the event that Remote's IR signal interferes with IR devices, e.g., TV, DVD player, the Remote can be switched to "4E" code by short pressing the System Code Switch on the Remote panel.



# **Hotkey Function**

One USB 1.1 port on rear panel of the switcher supports keyboard Hotkey function. This function is enabled by default, and can be set to disabled/enabled through combined keys on the connected keyboard.

| Key Operation                                 | Function  |
|---|---|
| Press "Ctrl" ("Left") + "Alt" + "Shift" + "[" | Enable hotkey.                                    |
| Press "Ctrl" ("Left") + "Alt" + "Shift" + "]" | Disable hotkey.                                   |
| Press the "Hotkey" twice quickly              | Switch to this hotkey.                            |
| Press "Hotkey" +"1"                           | Switch to input group 1.                          |
| Press "Hotkey" +"2"                           | Switch to input group 2.                          |
| Press "Hotkey" + "Left"                       | Switch to previous input group (Cyclegroup 2->1). |
| Press "Hotkey" + "Right"                      | Switch to next input group (Cycle group1->2).     |

### For example:

If you want to use the "Caps Lock" as a hotkey, please ensure the hotkey function is enabled, and press the "Caps Lock" key twice quickly to switch the hotkey to it, and other hotkeys are invalid. If you need to use other hotkeys, please repeat the above steps.

# **Specifications**

| Technical                            |   |  |
|--------------------------------------|---|--|
| Video Signal                         | DP in/out supports DP 1.4a standard, up to 8K@30Hz  |  |
| USB Data                             | USB 3.0, up to 5Gbps data transfer rate. With onehigh – power of 5V/1.5A port included.   |  |
| Input/Output Resolution<br>Supported | <b>VESA</b> :800 x 6006, 1024 x 7686, 1280 x 7686, 1280 x 8006,1280 x 9606, 1280 x 10246, 1360 x 7686, 1366 x 7686,1440 x 9006, 1600 x 9006, 1600 x 12006, 1680 x 10506,1920 x 12006, 2048 x 11526, 2560 x 14406,7,8,9,10,3440 x 14406,7,8,9,10 |  |

| Technical              |   |  |
|------------------------|---|--|
|                        | CTA:1280x720P5,6, 1920x1080P1,2,3,4,5,6,7,8,9,10,11, 3840x2160P1,2,3,4,5,6,7,8, 4096x2160P1,2,3,4,5,6,7,8, 5120×28801,2,3,5,7680×43201,2,3 1 = at 24 (23.98) Hz, 2 = at 25 Hz, 3 = at 30 (29.97) Hz, 4 = at 48 Hz, 5 = at 50 Hz, 6 = 60 (59.94) Hz, 7 = at 100Hz, 8 = at 120Hz, 9 = 144Hz, 10 = 165Hz, 11 = 240Hz |  |
| HDR Format Supported   | All HDR formats, including HDR 10, HLG, HDR 10+ and Dolby Vision  |  |
| Audio Format Supported | DP: Fully supports audio formats in DP 1.4a specification, including PCM 2.0/5.1/7. 1, Dolby TrueHD, Dolby Atmos, DTS-HD Master Audio and DTS:XMIC IN: StereoLI NE OUT: Stereo  |  |
| Max Data Rate          | 8.1Gbps per channel   |  |

| General                       |  |  |
|-------------------------------|--|--|
| Operating Temperature         | 0°C to + 45°C (32 to + 113 °F)                 |  |
| Storage Temperature           | -20 to +70°C (-4 to + 158 °F)                  |  |
| Humidity                      | 20% to 90%, non-condensing                     |  |
| Power Consumption             | 4.62W (Max)                                    |  |
| Device Dimensions (W x H x D) | 230mm x 28.2mm x 142.6mm/ 9.06" x 1.11" x5.61" |  |
| Product Weight                | 0.83kg/1.83lbs                                 |  |

### Warranty

Products are backed by a limited 1-year parts and labor warranty. For the following cases AV Access Technology Limited shall charge for the service(s) claimed for the product if the product is still remediable and the warranty card becomes unenforceable or inapplicable.

- 1. The original serial number (specified by AV Access Technology Limited) labeled on the product has been removed, erased, replaced, defaced or is illegible.
- 2. The warranty has expired.
- 3. The defects are caused by the fact that the product is repaired, dismantled or altered by anyone that is not from an AV AccessTechnology Limited authorized service partner. The defects are caused by the fact that the product is used or handled improperly, roughly or not as instructed in the applicable User Guide.
- 4. The defects are caused by any force majeure including but not limited to accidents, fire, earthquake, lightning, tsunami and war.
- 5. The service, configuration and gifts promised by salesman only but not covered by normal contract.
- 6. AV Access Technology Limited preserves the right for interpretation of these cases above and to make changes to them at any time without notice.

Thank you for choosing products from AV Access.

If you have any question, please contact us via the following emails:

General Enquiry: info@avaccess.com

Customer/Technical Support: <a href="mailto:support@avaccess.com">support@avaccess.com</a>





AV Access 8KSW21DP Dual Monitor DP KVM Switcher [pdf] User Manual 8KSW21DP Dual Monitor DP KVM Switcher, 8KSW21DP, Dual Monitor DP KVM Switcher, Monitor DP KVM Switcher, DP KVM Switcher, KVM Switcher, Switcher

### References

- ✓ AV Access | Quality & Budget Assured Pro AV Product Manufacturer
- <u>User Manual</u>

Manuals+,