

# Vista DisplayPort 4K

2K/4K DISPLAYPORT ULTRA HD KVM SWITCH



- ▶ Consolidate access and control of up to 4 DisplayPort computers using a single UHD monitor and USB keyboard/mouse
- ▶ Ultra HD video resolutions to 3840x2160@30Hz
- ▶ Uninterrupted USB keyboard/mouse emulation
- ▶ 10.2Gbps (340MHz) video bandwidth
- ▶ Includes transparent USB2.0 and audio support

## Features and Benefits

- Supports DisplayPort video resolutions up to 4K 3840×2160@30Hz
- Choose from two models, one with DisplayPort output and the other with HDMI output
- DisplayPort 1.2 and HDMI 1.4 compliant
- Zero pixel loss with TMDS signal correction
- Independent switching and operation of the KVM station and USB2.0 ports
- Complete USB keyboard/mouse emulation for error free booting of connected PC's/servers
- DVI and HDMI video can be supported using suitable cable adapters
- Fully supports Windows®, Mac®, and Linux®
- Switchable stereo audio on all ports
- Access and control the switch via front panel push buttons, keyboard hot-keys or the serial RS-232 port
- Serial control interface via the DB9 serial port using the Rose RCS-4RS/D9 4-port remote control switch
- EDID pass-through for all ports, enabling smooth and efficient video switching
- Flash upgradeable firmware and rack-mountable

## Product Overview

This versatile DisplayPort Ultra HD 4K KVM switch enables up to 4 PC/Servers to be accessed and controlled from a single DisplayPort or HDMI workstation.

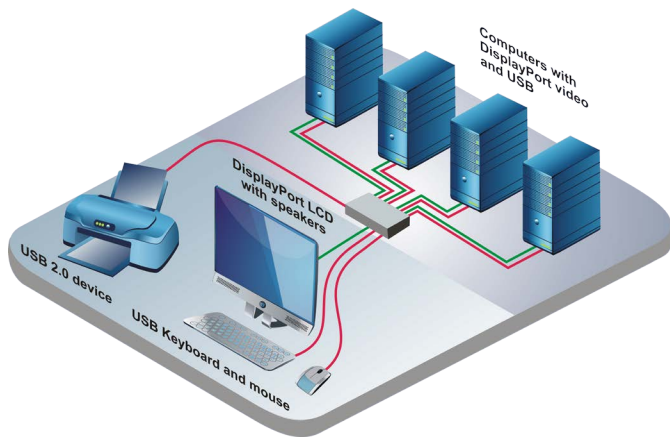
The Vista DisplayPort 4K supports screen resolutions up to 4K Ultra-HD (3840×2160@30Hz). Featuring EDID pass-through technology and video source recognition, the Vista DisplayPort 4K enables smooth and efficient video switching between connected video sources. For connection to a DVI display, simply install a suitable DVI adapter cable.

The USB keyboard and mouse emulation simulates the presence of a keyboard and mouse for every attached computer through the connected USB cable, ensuring that switching between host computers is seamless and completely uninterrupted.

The Vista DisplayPort 4K is USB peripheral-friendly, being compatible with USB1.1/2.0 devices and providing full USB keyboard and mouse emulation. The switch is easy to control, using keyboard hot-keys, a simple front-panel interface, or RS-232 serial port commands.

One special feature of this switch is the ability to operate using simultaneous independent device selection. This enables the use of a USB keyboard and mouse with one computer while other USB peripherals such as scanners and printers are connected to other computer sources.

## Typical Application



The Vista DisplayPort 4K is the ideal solution for medical, industrial, studio, and defense applications where it is not practical or safe to have multiple computers in the vicinity of the workstation.

**Installation** Connect the DisplayPort, USB and audio cables from the computers to the respective ports on the Vista DisplayPort 4K switch. Connect the USB keyboard and mouse to the two USB ports on the far right side of the chassis. The 2 USB ports on the left are for the connection of USB1.1 2.0 peripherals. Connect speakers to the audio-out connector on the switch and connect the monitor to the DisplayPort or HDMI output port.

If serial switching is to be used, connect a laptop, controller or a Rose RCS serial switch to the RS-232 serial port. Power on the display, then the switch, followed by the PC/Servers.

**Cables** Each PC/Server requires 1 x DisplayPort and 1 x USB-AB cable. The maximum useable cable length is 20ft (6.0m) either side of the switch. On the user side, the peripheral cables connect directly to the Vista DisplayPort 4K switch.

**EDID Learning** For ease of use, the Vista DisplayPort 4K features plug-and-play EDID. By simultaneously pressing the two front panel buttons, the switch will learn the EDID characteristics of the connected display.

## Specifications

|                               |                                                                                                                                                                                        |                                      |
|-------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|
| <b>Dimensions (W x D x H)</b> | 12.75" × 6.0" × 2.0"<br>323.8 × 152.4 × 50.8 mm                                                                                                                                        |                                      |
| <b>Weight</b>                 | 3.75 lbs (1.7 kg)                                                                                                                                                                      |                                      |
| <b>Power</b>                  | 100-240 VAC, 50-60Hz<br>+5V 4A, 20W maximum                                                                                                                                            |                                      |
| <b>Video resolution</b>       | 2K and up to 4K 3840×2160@30Hz                                                                                                                                                         |                                      |
| <b>Video bandwidth</b>        | Single-link 340MHz (10.2Gbit/s)                                                                                                                                                        |                                      |
| <b>Data link rate</b>         | Maximum 5.4Gbit/s                                                                                                                                                                      |                                      |
| <b>HDCP compliant</b>         | Yes                                                                                                                                                                                    |                                      |
| <b>Video cable length</b>     | Input/output up to 20ft (6.0m) each side                                                                                                                                               |                                      |
| <b>Video emulation</b>        | Full EDID DisplayPort emulation via HDMI output                                                                                                                                        |                                      |
| <b>Video interface</b>        | DP to DP                                                                                                                                                                               | DP to HDMI                           |
|                               | In: 4 × DisplayPort<br>Out: 1 × DisplayPort                                                                                                                                            | In: 4 × DisplayPort<br>Out: 1 × HDMI |
| <b>USB interface</b>          | Signal type: USB2.0, USB1.1, USB1.0 with internal hub<br>USB input: 4 × USB-B Type<br>USB output: 2 × USB1.1 Type A for keyboard and mouse<br>2 × USB2.0 Type A transparent            |                                      |
| <b>Audio interface</b>        | Input: 4 × 3.5mm Stereo Audio<br>Output: 1 × 3.5mm Stereo Audio<br>Impedance: 600 ohm<br>Frequency response: 20Hz ~ 20KHz<br>Nominal level: 0 - 1.0V<br>Common mode: Rejection at 60dB |                                      |
| <b>Serial RS-232</b>          | 1 × DB9F, RS-232, 9,600bps                                                                                                                                                             |                                      |
| <b>Controls</b>               | 2 × front panel buttons and 4 × LED's<br>Hot-keys via keyboard<br>Emulation, keyboard and mouse only                                                                                   |                                      |
| <b>Supported devices</b>      | PC's, Mac®, Linux®                                                                                                                                                                     |                                      |
| <b>Supported OS</b>           | Windows, Linux, Mac OS, Sun OS, Unix                                                                                                                                                   |                                      |
| <b>Environment</b>            | Operating temp: 23°F – 95°F (-5°C – 35°C)<br>Storage temp: -4°F – 185°F (-20°C – 85°C)<br>Rel. humidity: 5% – 90%, non-condensing                                                      |                                      |
| <b>Approvals</b>              | UL, CE, RoHS compliant                                                                                                                                                                 |                                      |

## Part numbers

|                      |                                                                      |
|----------------------|----------------------------------------------------------------------|
| <b>KVM-4TDP-A1</b>   | Vista DP 4K, 4-Port KVM Switch, DP input, DP output, USB2.0, Audio   |
| <b>KVM-4TDPHM-A1</b> | Vista DP 4K, 4-Port KVM Switch, DP input, HDMI output, USB2.0, Audio |
| <b>CAB-DPDPMMnnn</b> | DisplayPort M/M cable (6ft or 10ft)                                  |
| <b>CAB-USBABnnn</b>  | USB-AB cable (6ft or 10ft)                                           |
| <b>CAB-SPMMnnn</b>   | Audio cable, 3.5mm audio jack (6ft / 10ft)                           |
| <b>RM-FR19</b>       | 19" rackmount shelf                                                  |

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