

Vista DisplayPort 4K

2K/4K DISPLAYPORT ULTRA HD KVM SWITCH



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

- ▶ Consolidate access and control of up to 4 Ultra-HD 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

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.

Applications 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.



Vista DisplayPort 4K – front panel



Vista DisplayPort 4K - rear panel



Vista DisplayPort 4K with HDMI output - rear panel

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

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

Part numbers

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

WWW.ROSE.COM ▪ **sales@rose.com** ▪ **(800) 333-9343**

Rose Electronics ▪ 10707 Stancliff Road ▪ Houston, Texas 77099
Rose USA (281) 933-7673 ▪ Rose Europe +49 (0) 2454 969442
Rose Asia +65 6324 2322 ▪ Rose Australia +61 (0) 421 247083
datasheet-vista-displayport-4k.pdf ▪ 2017-11-21

 **ROSE**
ELECTRONICS
WWW.ROSE.COM