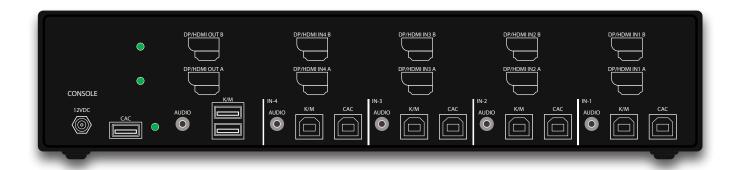


Secure 4-Port, Dual-Head DP/HDMI to HDMI KVM Switch with Dedicated CAC Port and 4K Support



KEY FEATURES

- Supports Windows, Mac and Linux OS
- Dual-head DP/HDMI to HDMI video interface
- 4K Ultra-HD resolution supports up to 4K @ 60 Hz
- Supports balanced speakers output and switching
- Advanced configurable CAC port
- Front panel tactile buttons with LED indicator
- External power supply Level VI efficiency

SECURITY FEATURES

- Non-reprogrammable ROM
- Active Anti-tamper switches
- Long-life internal Anti-tampering battery
- External tamper-evident seals
- Keyboard, Mouse and Video emulation
- Absolute isolation No data leakage between ports
- Certified by NIAP, the latest Common Criteria (Protection Profile for Peripheral Sharing Switch Version 4.0)

APPLICATIONS

- Government Operations
- Defense Applications
- Secure Control Rooms
- Corporate Communications
- Server Operations
- Educational Administrations
- Medical Facilities
- Banking Network
- Insurance Data Centers
- Transit Management
- Industrial Operation
- Intelligence Communications



WHY SECURE KVM?

Traditional non-secure KVM switches offer centralized control of multiple computers, but offer no absolute isolation between them. This exposes systems to the possibility of malicious damage and disruption, and acquisition of sensitive data from one computer to another.

Black Box's Secure KVM Switch is designed for use in secure defense and intelligence applications where sensitive data must be protected. The Secure KVM Switch is NIAP PP 4.0 certified and equipped with the highest security features that meet today's Information Assurance safe control standards. The switch prevents data leakage between computers that can run at different security levels, and eliminates any potential cyber threat.



SECURE EDID LEARN AND VIDEO EMULATION

The KVS4-2004HVX simulates a generic EDID as default, allowing it to operate most of the connected monitors. Both selected and non-selected computers maintain a constant connection with the unit's video emulation controllers, allowing for ultra-fast switching and restricting discovery of newly connected monitors during switching operations. Upon activating the KVM, the unit will quickly and automatically learn new EDID for specific monitors. The unit then prevents unwanted and unsecure data from getting transmitted through DDC lines by means of secure EDID learning and emulation.



Many secure KVM switches support CAC devices, such as smart-card and biometric readers, bolstering security when using the device. However, Black Box takes CAC security even further, allowing users to assign specific peripheral devices to the KVS4-2004HVX's CAC port. Once a peripheral device has been registered by an authenticated admin, users can then switch the connection between that device and the PCs along with KVM switching.



ULTRA-SECURE KVM SWITCHING

The KVS4-2004HVX allows users to control KVM (Keyboard, Video and Mouse) operation on up to four computers with two HDMI™ displays. It features mechanical, electrical and optical signal isolation to prevent hacking and data leakage in environments where security is paramount.

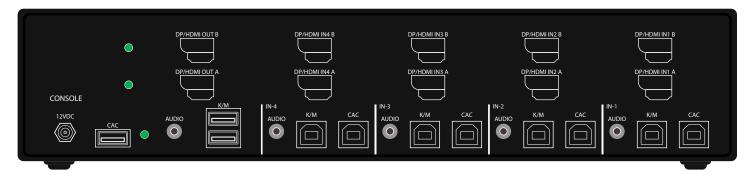
With the KVS4-2004HVX, all data relays are controlled by inverted signals, shielding connections from outside intrusion by forcing them each to work one at a time. Each port uses its own isolated data channel and each unit features non-reprogrammable ROM to better protect the switch's functions. Better yet, the KVS4-2004HVX offers the highest security when accessing classified and public networks over the internet through these isolated connections. By isolating connections between networks, the KVS4-2004HVX ensures no data is leaked between secure ports and the outside world.

The KVS4-2004HVX has clearly marked front-panel buttons for controlling the device, so securely switching between sources is always simple. For high-grade secure switching made easy, look no further than the KVS4-2004HVX.

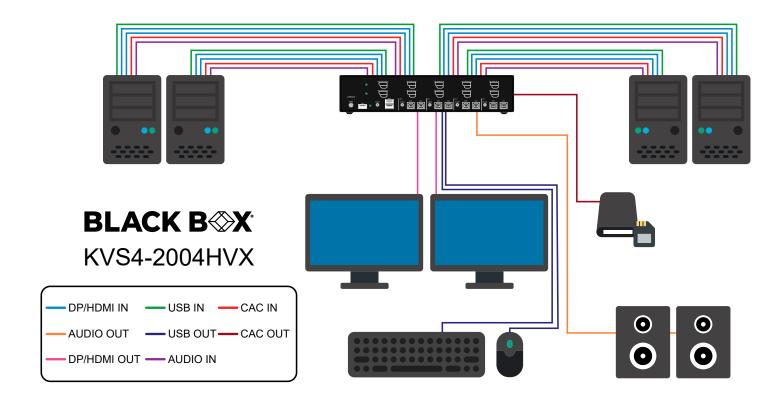


KEYBOARD AND MOUSE EMULATION

The Secure KVM emulates (simulates) the presence of a keyboard and mouse for every attached computer through a USB cable. Both selected and non-selected computers maintain a constant connection with the unit's keyboard-mouse emulation controllers, allowing for ultra-fast switching and restricting discovery of newly connected peripherals during switching operations. Emulation of keyboard and mouse also prevents direct connection between the peripherals and the connected computers, shielding systems from potential vulnerabilities.



INSTALLATION DIAGRAM



SPECIFICATIONS

VIDEO	
Format	DisplayPort™, HDMI
Input Interface	(8) DisplayPort or HDMI
Output Interface	(2) DisplayPort or HDMI
Resolution	Up to 4K@60 Hz
DDC	5 volts p-p (TTL)
Input Equalization	Automatic
Input Cable Length	Up to 20 ft.
Output Cable Length	Up to 20 ft.
USB	
Input Interface	(8) USB Type B
Output Interface	(2) USB 1.1 Type A for KM Devices
Emulation	USB 1.1 and USB 2.0 Compatible
CAC	Configurable USB 2.0 Port

AUDIO		
Audio Input	(4) 3.5mm stereo audio	
Audio Output	(1) 3.5mm stereo audio	
CONTROL		
Front Panel	Front panel SELECT buttons	
OTHER		
Power	External 100-240 VAC/ 12VDC3A @ 36W	
Dimensions	12.57" W x 1.76" H x 6.69" D	
Weight	4.2 lbs	
Approvals	NIAP PP 4.0, UL, CE, ROHS Compliant	
Operating Temp.	+32 to +104°F (0 to +40°C)	
Storage Temp.	-4 to 140°F (-20 to +60°C)	
Humidity	Up to 80% (no condensation)	

ORDERING INFORMATION	
Part No.	Description
KVS4-2004HVX	4-Port DH Secure Pro DP/HDMI to DP/HDMI KVM w/audio and CAC, PP 4.0

Black Box Corporation

1000 Park Drive Lawrence, PA 15055-1018

Phone: 877-877-2269

www.blackbox.com

DISCLAIMER

Black Box Corporation shall not be liable for damages of any kind, including, but not limited to, punitive, consequential or cost of cover damages, resulting from any errors in the product information or specifications set forth in this document and Black Box Corporation may revise this document at any time without notice.

TRADEMARKS

Black Box and the Black Box logo type and mark are registered trademarks of BB Technologies, Inc.

Any other trademarks mentioned in this document are acknowledged to be the property of the trademark owners.

© COPYRIGHT 2022, 2023. BLACK BOX CORPORATION. ALL RIGHTS RESERVED.

EN_KVM_Datasheet_KVS4-2004HVX_Rev1_2310.pdf