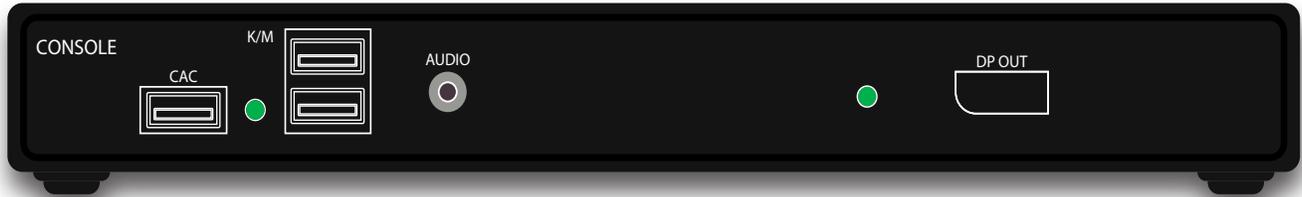


# Isolate the computer from the display, keyboard and mouse to ensure safety and security



## KEY FEATURES

- Supports Windows, Mac and Linux OS
- Single-head DP video interface
- 4K Ultra-HD resolution supports up to 3840 x 2160 @ 30 Hz
- 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

- |   |  |
|---|--|
| <ul style="list-style-type: none"> <li>• Government Operations</li> <li>• Defense Applications</li> <li>• Secure Control Rooms</li> <li>• Corporate Communications</li> <li>• Server Operations</li> <li>• Educational Administrations</li> </ul> | <ul style="list-style-type: none"> <li>• Medical Facilities</li> <li>• Banking Network</li> <li>• Insurance Data Centers</li> <li>• Transit Management</li> <li>• Industrial Operation</li> <li>• Intelligence Communications</li> </ul> |
|---|--|



## WHY SECURE KVM?

Connecting peripherals such as keyboard, mouse and speakers to a PC introduces potential data leakage and hacking risks as there are no filters nor data detection and protection features between the PC and the peripherals.

Black Box's Secure Isolator is designed for use in secure defense and intelligence applications where sensitive data must be protected. The Isolator 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 a PC and connected peripherals, and eliminates any potential cyber threat.



## KEYBOARD AND MOUSE EMULATION

The Secure Isolator emulates (simulates) the presence of a keyboard and mouse for every attached computer through a USB cable. Emulation of keyboard and mouse prevents direct connection between the peripherals and the connected computer, shielding systems from potential vulnerabilities.



## CAC SUPPORT

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 KVS4-8001VX's CAC port.



## ULTRA-SECURE KVM SWITCHING

The KVS4-8001VX allows users to control KVM (Keyboard, Video and Mouse) operation on one computer with DP display. It features mechanical, electrical and optical signal isolation to prevent hacking and data leakage in environments where security is paramount.

With the KVS4-8001VX, 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 KVS4-8001VX offers the highest security when accessing classified and public networks over the internet through these isolated connections. By isolating connections, the KVS4-8001VX ensures no data is leaked between secure ports and the outside world.



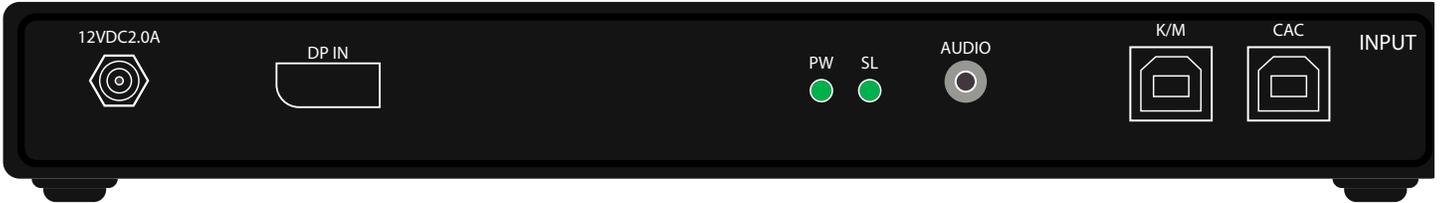
## SECURE EDID LEARN AND VIDEO EMULATION

The KVS4-8001VX simulates a generic EDID as default, allowing it to operate most of the connected monitors. 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.

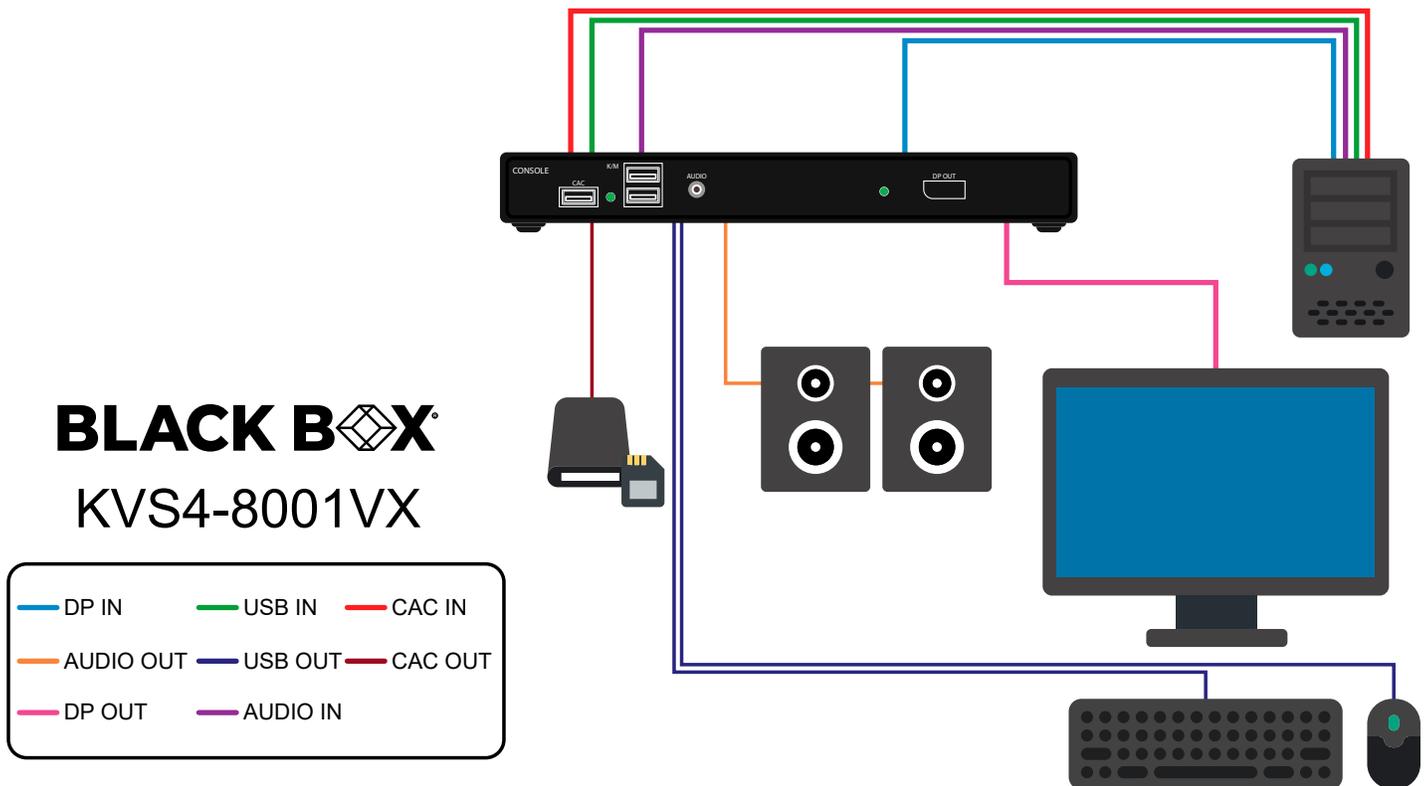
KVS4-8001VX (Front)



KVS4-8001VX (Back)



## INSTALLATION DIAGRAM



# SPECIFICATIONS

VIDEO	
Format	DisplayPort™
Max. Pixel Clock	248 MHz
Input Interface	(1) DisplayPort
Output Interface	(1) DisplayPort
Resolution	Up to 4K (3840x2160 @30Hz)
DDC	5 volts p-p (TTL)
Input Equalization	Automatic
Input Cable Length	Up to 20 ft.
Output Cable Length	Up to 20 ft.
Data Rate	1.65 Gbps
USB	
Input Interface	(2) 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	(1) 3.5mm stereo audio
Audio Output	(1) 3.5mm stereo audio
OTHER	
Power	External 100-240 VAC/ 12VDC3A @ 24W
Dimensions	8" x 3.8" x 1" (20.3 x 9.5 x 2.5 cm)
Weight	0.6 lb. (0.3 kg)
Approvals	NIAP PP 3.0, UL, CE, ROHS Compliant
Operating Temp.	+32 to +131°F (0 to +55°C)
Storage Temp.	-4 to 185°F (-20 to +85°C)
Humidity	Up to 95%

ORDERING INFORMATION	
Part No.	Description
KVS4-8001VX	1-Port SH Secure DP KVM w/audio and CAC, PP 4.0

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KVS4-8001VX\_ds\_Rev1.pdf