

NIAP4 Certified Secure 2-Port 4K DP/HDMI KVM Switch with CAC for High-Security, Multi-Domain Environments

Introduction

The Black Box KVS4-1002HVX is a secure 2-port, single-head DisplayPort®/HDMI-to-HDMI KVM switch with CAC that enables one user to control two computers while keeping them strictly isolated from each other. Designed for defense, intelligence, and other high-security environments, it is NIAP PP 4.0 certified and uses hardware-based separation to prevent cross-domain data leakage while delivering 4K Ultra-HD video performance.

Applications

- Government & Defence
- Command & Control
- Secure Meeting Rooms
- Industrial Control Systems (ICS/SCADA)
- Financial Institutions

Product Images

Front

KVS4-1002HVX

Rear

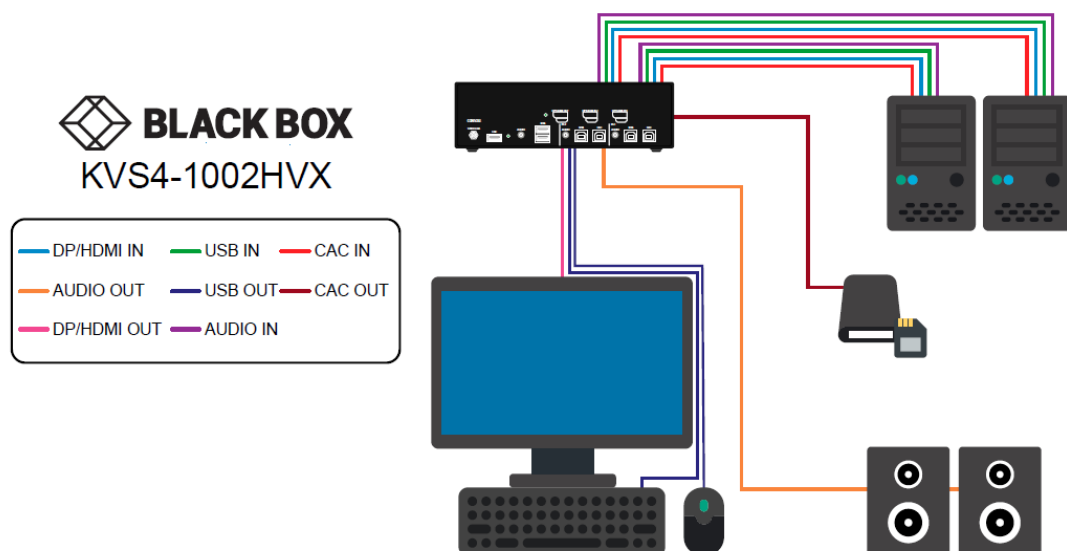


Key Features

- **NIAP PP 4.0 Certified** – Meets the highest common criteria protection profile for peripheral sharing switches required by government and defense agencies.
- **4K Display Performance** – Supports single-head Displayport® or HDMI input to HDMI output with resolutions up to 3840 x 2160 at 30 hz, ensuring sharp, reliable ultra-hd video performance.
- **Secure USB with CAC Support**– Features secure USB keyboard and mouse emulation plus a configurable USB 2.0 CAC port for controlled peripheral connectivity and secure authentication device support.
- **Balanced audio switching**– Supports balanced speaker output and switching, enabling secure audio management alongside video and peripheral control.
- **Simple LED Operation** – Designed with front-panel tactile buttons and LED indicators for clear channel status visibility and quick, intuitive switching.
- **High-Efficiency Power Design**– Includes an external Level VI efficiency power supply, helping reduce energy consumption while supporting reliable operation across 100–240 VAC input environments.
- **Hardened Security Architecture**– Built with non-reprogrammable ROM, active anti-tamper switches, a long-life internal anti-tampering battery, tamper-evident seals, and absolute port isolation to defend against intrusion and unauthorized data transfer.

Application Diagram

INSTALLATION DIAGRAM



Specifications

Video		KVS4-1002HVX
Input Interface		(2) DisplayPort® or HDMI
Output Interface		(2) HDMI
Input Resolution		Up to 4K (3840x2160 @30Hz)
Output Resolution		Up to 4K (3840x2160 @30Hz)
Input Cable Length		Up to 20 ft.
Output Cable Length		Up to 20 ft.

USB		
Input Interface		4 - 2 for the CAC ports, 2 for the standard USB ports
Output Interface		(2) USB 1.1 Type A for KM Devices
Compatibility		USB 1.1 and USB 2.0 Compatible

AUDIO		
Audio Input		(2) 3.5mm stereo audio
Audio Output		(1) 3.5mm stereo audio

External PSU		
Input Voltage/Volts		100-240 VAC
Output Voltage/Volts		12 VDC
Output Current/Amps		2 Amps MAX

Device Power		
Input Voltage/Volts		12V DC
Max Current		1.3 Amps
Max power consumption		36 Watts
BTU (British Thermal Units)		3.41

Mechanical		
Dimensions (HxWxD)		2.63 " H x 8.8" W x 6.69" D (66.8 x 223.5 x 169.9 mm)
Weight		3.85 lb. (1.74 kg)

Specifications (continued)

Environmental	
Operating Temperature	32°F to 104°F (0°C to 40°C)
Storage Temperature	-4°F to 140°F (-20°C to 60°C)
Humidity Operating	up to 80% RH, non condensing
Altitude Range	< 6000 feet

Certification	
Regulatory	FCC, CE, RoHS, UL
Security	NIAP Protection Profile Ver. 4.0

Warranty	
Standard Warranty	2 Year standard Warranty
Warranty Options	Extension by 1 or 3 years available
Extended Warranty (Optional)	
Extended Warranty SKU for 1 year	KVS4-1002HVX-W1
Extended Warranty SKU for 3 year	KVS4-1002HVX-W3

Ordering Information

Product Code	Description
KVS4-1002HVX	2-Port SH Secure Pro DP/HDMI to HDMI KVM w/audio and CAC, PP 4.0

Product Includes:

- (1) Secure KVM Switch
- (1) 12 VDC Wallmount Supply (ICP36-120-3000) with US, EU, UK, and AU adapter clips
- (1) Set of 4 rubber feet (already be attached)
- (1) Quick Start Guide

Accessories

Product Code	Description
KVSC-4	Secure KVM Analog Remote Controller
KVSC-16	Secure KVM Touchscreen Remote Controller



Cable Options

Product Code	Description
SKVMCBL-2DP-06TAA	6' KVM USB Dual DP Cable - Audio - TAA
SKVMCBL-2DP-10TAA	10' KVM USB Dual DP Cable - Audio - TAA
SKVMCBL-2DVI-06TAA	6' KVM USB DUALNK Dual DVI Cable – Audio - TAA
SKVMCBL-2HDMI-06TAA	6' KVM USB Dual HDMI Cable - Audio - TAA
SKVMCBL-2HDMI-10TAA	10' KVM USB Dual HDMI Cable – Audio - TAA
SKVMCBL-DP-06TAA	6' KVM USB DP Cable - Audio -TAA
SKVMCBL-DP-10TAA	10' KVM USB DP Cable – Audio -TAA
SKVMCBL-2DP-10	10' KVM USB DUAL DP Cable - Audio
SKVMCBL-2HDMI-06	6' KVM USB Dual HDMI Cable - Audio
SKVMCBL-DP-06	6' KVM USB DP Cable – Audio
SKVMCBL-DP-10	10' KVM USB DP Cable – Audio

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Black Box is a trusted IT solutions provider delivering cutting-edge technology products and world-class consulting services to businesses across the globe in every industry. The breadth of our global reach and depth of our expertise accelerate customer success by bringing people, ideas, and technology together to solve real-world business problems.

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