

NIAP4 Certified Secure 2-Port 4K DP-to-Dual-HDMI MST KVM Switch with CAC for High-Security, Multi-Domain Workstations

Introduction

The Black Box KVS4-1002VMX is a secure 2-port, single-head DisplayPort® MST KVM switch with CAC that lets one user control two computers while keeping them completely 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 dual-monitor 4K Ultra-HD performance.

Applications

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

Product Images

Front

Rear

KVS4-1002VMX

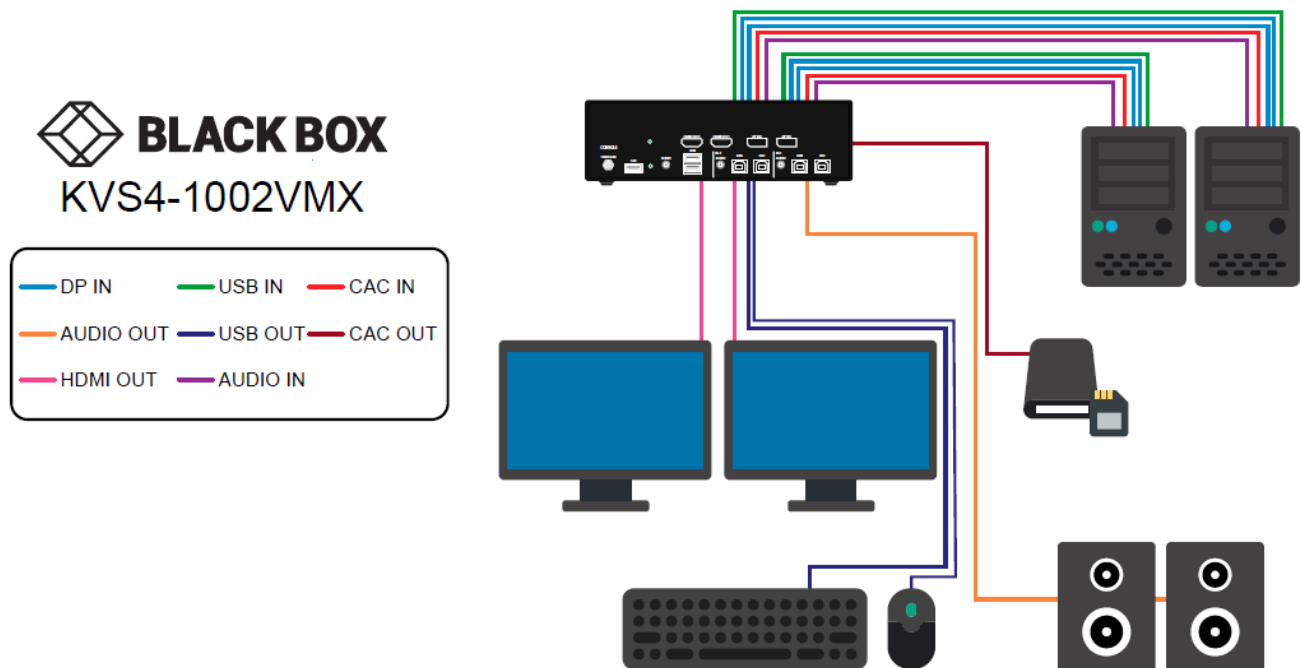


Key Features

- **NIAP 4.0 Certified Security**– Fully compliant with NIAP protection profile v4.0, this secure kvm switch delivers uncompromising protection for sensitive environments. it enforces strict hardware-based isolation to prevent data leakage and unauthorized cross-domain access.
- **Advanced Display Performance**– Features displayport 1.2a with multi-stream transport (MST), enabling dual hdmi outputs per system. supports up to 4k ultra-hd resolution, ensuring sharp, high-quality visuals across multiple displays.
- **Secure USB & CAC support** – Includes isolated USB interfaces for keyboard and mouse along with a configurable CAC (Common Access Card) port, enabling secure authentication while preventing unauthorized data transfer.
- **Balanced Audio Switching**– Integrated stereo audio support with balanced speaker output ensures clear, reliable audio while maintaining strict signal separation between channels.
- **Simple LED & User Controls**– Front-panel tactile switching buttons with clear LED indicators provide intuitive operation and real-time system status visibility.
- **High-Efficiency Power Design** – Utilizes an external Level VI power supply for enhanced energy efficiency, reduced heat generation, and dependable long-term performance.
- **Hardened Security Architecture**- Engineered with multiple layers of physical and electronic protection, including non-reprogrammable ROM, active anti-tamper mechanisms, tamper-evident seals, and an internal anti-tampering battery ensuring maximum defense against intrusion.

Application Diagram

INSTALLATION DIAGRAM



Specifications

Video		KVS4-1002VMX
Input Interface		(2) DisplayPort®
Output Interface		(2) HDMI
Input Resolution		Up to 4K (3840x2160 @60Hz)
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) USB Type B
Output Interface		(2) USB 1.1 Type A for KM Devices
Compatibility		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

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	KVS4-1002VMX-W1
Extended Warranty SKU for 3 year	KVS4-1002VMX-W3

Ordering Information

Product Code	Description
KVS4-1002VMX	2-Port SH DP MST to 2 x HDMI Secure 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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