

# 4-Port Secure DVI-D Matrix KVM Switch with Audio, KB/Mouse USB Emulation and CAC Support (2 Users)



# **KEY FEATURES**

- Supports Windows, Mac and Linux OS
- Single-head DVI-D video interface
- 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 EDID emulation
- Absolute isolation No data leakage between ports
- Certified by NIAP, the latest Common Criteria (Protection Profile for Peripheral Sharing Switch Version 3.0)

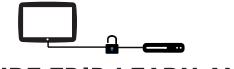
## **APPLICATIONS**

- 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



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 Switch is NIAP PP 3.0 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 eliminate any potential cyber threat.



### SECURE EDID LEARN AND VIDEO EMULATION

The SS4P-DVI-4X2-UCAC 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



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 SS4P-DVI-4X2-UCAC'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 PC's along with KVM switching.



The SS4P-DVI-4X2-UCAC allows users to control KVM (Keyboard, Video and Mouse) operation on up to four computers with DVI displays. It features mechanical, electrical and optical signal isolation to prevent hacking and data leakage in environments where security is paramount.

With the SS4P-DVI-4X2-UCAC, 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 SS4P-DVI-4X2-UCAC offers the highest security when accessing classified and public networks over the internet through these isolated connections. By isolating connections between networks, the SS4P-DVI-4X2-UCAC ensures no data is leaked between secure ports and the outside world.

The SS4P-DVI-4X2-UCAC 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 SS4P-DVI-4X2-UCAC.

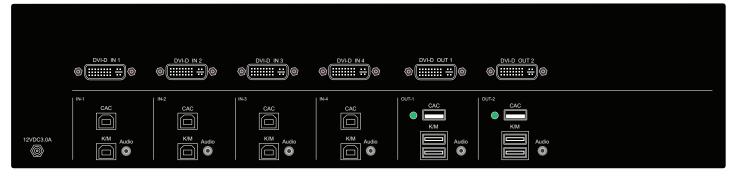


The Secure KVM emulates (simulates) the presence of a keyboard and mouse for every attached computer through a USB cable. Both selected and non-selected computers maintain a constant connection with the unit's keyboard-mouse emulation controllers, allowing for ultra-fast switching and restricting discovery 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.

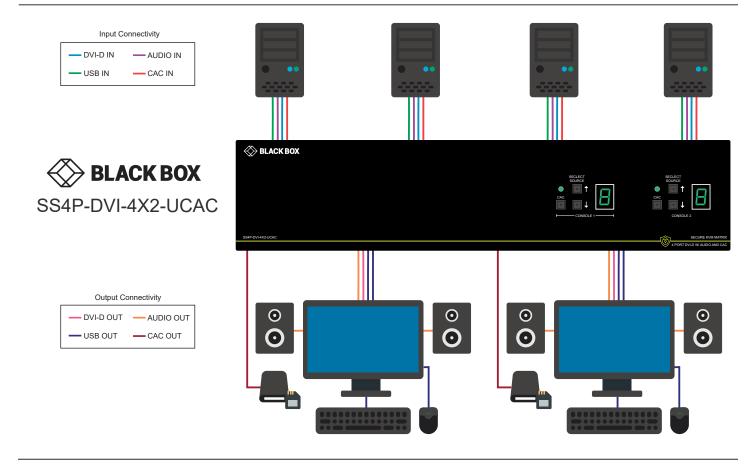
#### SS4P-DVI-4X2-UCAC (Front)

| BLACK BOX         |  |  |
|-------------------|--|--|
|                   | SECLECT<br>SOURCE<br>CAC<br>CAC<br>CONSOLE 1 | SECLECT<br>SOURCE<br>CAC<br>CONSOLE 2              |
| SS4P-DVI-4X2-UCAC |  | SECURE KVM MATRIX                                  |
|                   |  | SECURE KVM MATRIX<br>4 PORT DVI-D W/ AUDIO AND CAC |

#### SS4P-DVI-4X2-UCAC (Back)



# **INSTALLATION DIAGRAM**



# **SPECIFICATIONS**

| VIDEO               |                       |  |
|---------------------|-----------------------|--|
| Format              | DVI-D                 |  |
| Max. Pixel Clock    | 248 MHz               |  |
| Input Interface     | (4) DVI-D 29-pin      |  |
| Output Interface    | (2) DVI-D 29-pin      |  |
| Resolution          | 1080p and 4K/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 K/M             |                       |  |
| Input Interface     | (4) USB Type B        |  |
| Output Interface    | (2) USB Dual Type A   |  |
| USB CAC             |                       |  |
| Input Interface     | (4) USB Type B        |  |
| Output Interface    | (2) USB Single Type A |  |

| AUDIO           |                                     |
|-----------------|-------------------------------------|
| Audio Input     | (4) 3.5mm stereo audio              |
| Audio Output    | (2) 3.5mm stereo audio              |
| CONTROL         |                                     |
| Front Panel     | Front panel SELECT buttons          |
| OTHER           |                                     |
| Power           | External 100-240 VAC/ 12VDC3A @ 36W |
| Dimensions      | 17"W x 3.4"H x 8.4"D                |
| Weight          | ?                                   |
| Approvals       | NIAP PP 3.0, 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   |  |
| SS4P-DVI-4X2-UCAC    | 4-Port Secure DVI-D Matrix KVM Switch w/ Audio, KB/Mouse USB Emulation and CAC, PP 3.0 with power supply 12VDC/3A |  |

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