

UNCLASSIFIED

KVM Switch Family

A rich portfolio of commercial, secure and rugged peripheral sharing products for interacting with multiple computer sources.

HLT34095 Rev 1.1



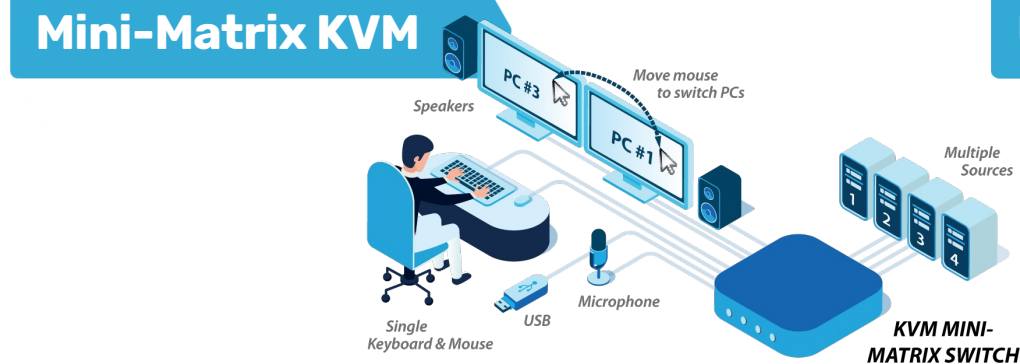
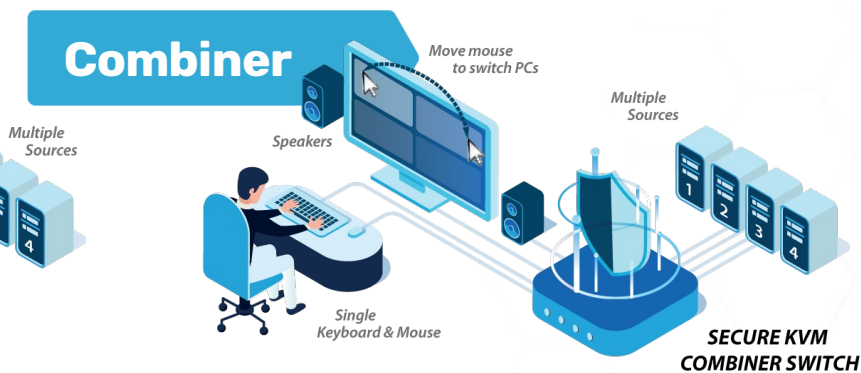
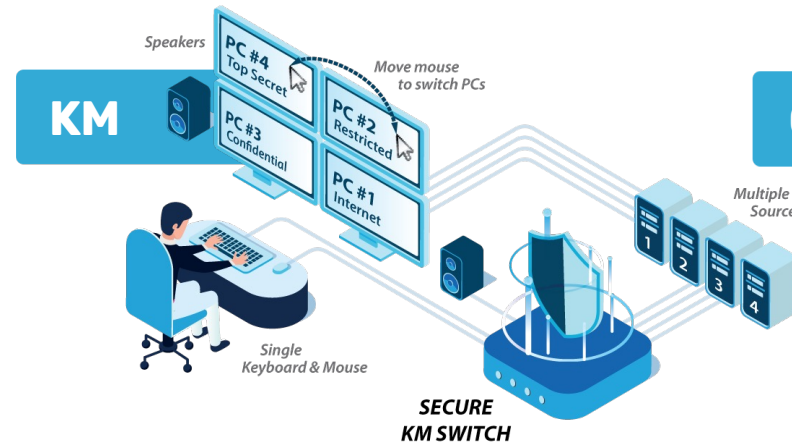
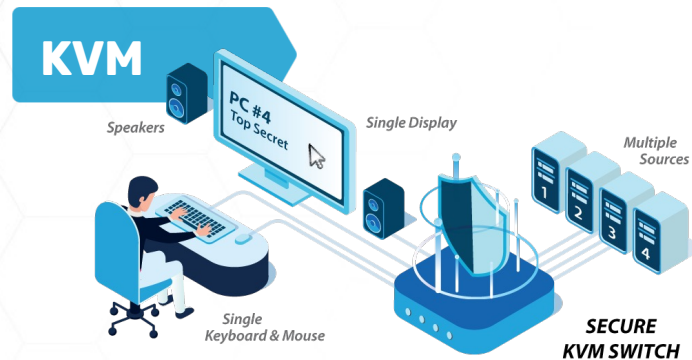
 **HighSecLabs**
Highest Security Solutions

ABOUT HSL

- High Sec Labs is the world's leading manufacturer of peripheral sharing cybersecurity products.
 - The portfolio includes these switches:
 - KVM
 - KM
 - Matrix
 - Ultra Mini-Matrix
 - Combiner (multiviewer + scaler + KVM)
 - These products are available as:
 - Secure (for multi-domain, secure use)
 - Rugged (for secure military deployment)
 - Commercial (for general purpose use)



KVM SWITCH FAMILY



THE HSL DIFFERENCE

The need for a secure switch

- Networks of different classification levels are typically air-gapped to prevent data exchange
- Sharing a single set of peripherals to access different air-gapped networks can be exploited as an attack vector.
- Peripheral devices have security vulnerabilities that are exploitable for:
 - Data leaks
 - Signaling
 - Malicious code attacks
- **HSL's SECURE products eliminate the vulnerabilities of sharing peripherals.**
- Common Criteria provides an official standard for sharing peripherals between computers
- NIAP (National Information Assurance Partnership) is the certifying body in the US.
- HSL's SECURE products are **certified to the latest Common Criteria / NIAP requirements.**

Production

- Both secure and commercial products are BAA and TAA compliant.
- Secure Products are manufactured using secure production lines and supply chains.
- Manufacturing facility in Huntsville, Alabama.



COMMERCIAL FEATURES

There are several features in HSL's commercial products that are not permitted in a certified NIAP secure product.

These features include:

- ✓ Copy/Paste between sources, including with USB support
- ✓ USB 3.0 support
- ✓ Auto-channel switch upon new USB detection
- ✓ Channel switching using keyboard shortcuts
- ✓ Microphone support



Commercial KVM

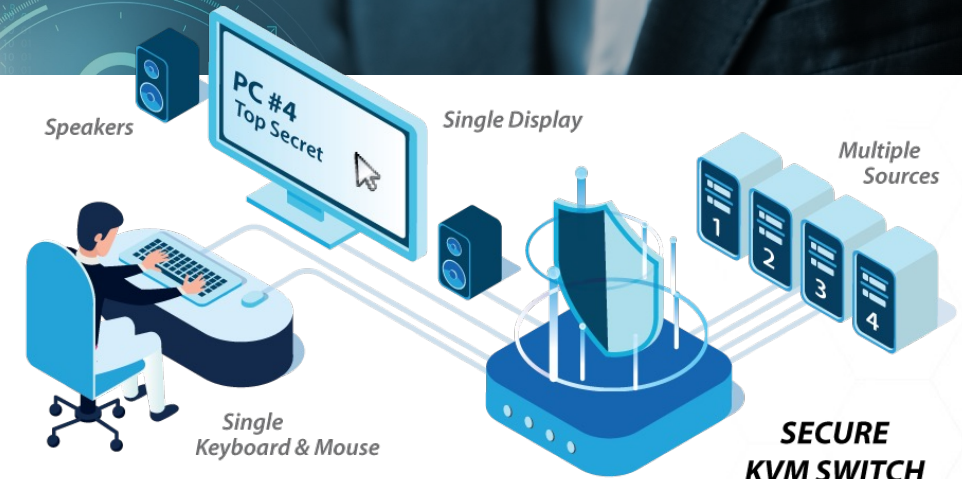
KVM SWITCH

A KVM (Keyboard-Video-Mouse) switch shares one set of peripherals: keyboard, display, mouse, audio, and USB, between all connected computers.

Users need only a **single** keyboard and mouse to control **all** their computers - freeing up their desktops from the clutter of multiple peripherals

- ✓ Up to 4K video 3840 x 2160 @ 60Hz
- ✓ 2, 4, 8-port and 16-port (commercial) versions available
- ✓ Single-head and Dual-head versions available
- ✓ Copy/Paste between sources (Commercial)
- ✓ Freeze Audio
- ✓ Filtered USB
- ✓ Special dual DisplayPort /HDMI connectors

HSL has NIAP certified rugged, secure and commercial KVM switch products.



Secure KVM



KM SWITCH

A KM (Keyboard-Mouse) switch shares one set of peripherals including a keyboard, mouse, audio, and USB, between multiple computers.

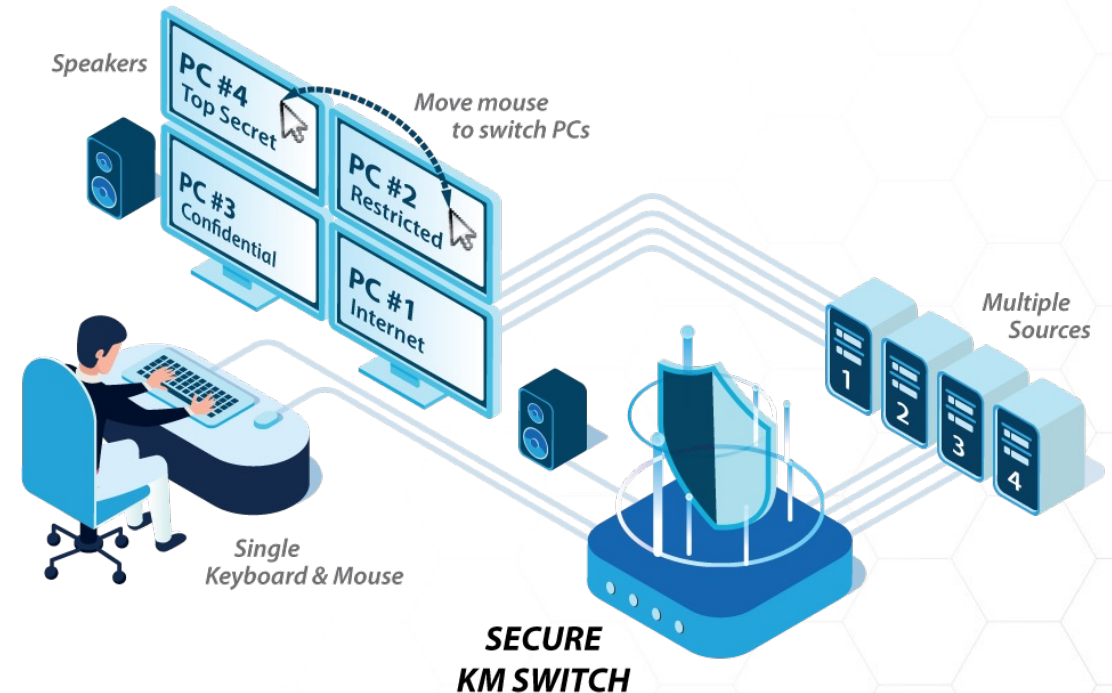
A user needs only a single keyboard and mouse to interact with all the computers.

A KM lets users:

- Clearly view all computers - at the same time - as the displays are directly connected to each computer
- Free up their desktops from the clutter of multiple peripherals
- Switch access by dragging the mouse

- ✓ 2, 4, and 8-port versions available
- ✓ USB 3.0 support (Commercial)
- ✓ Copy/Paste between sources (Commercial)
- ✓ Freeze Audio

HSL has both secure and commercial KM switch products.

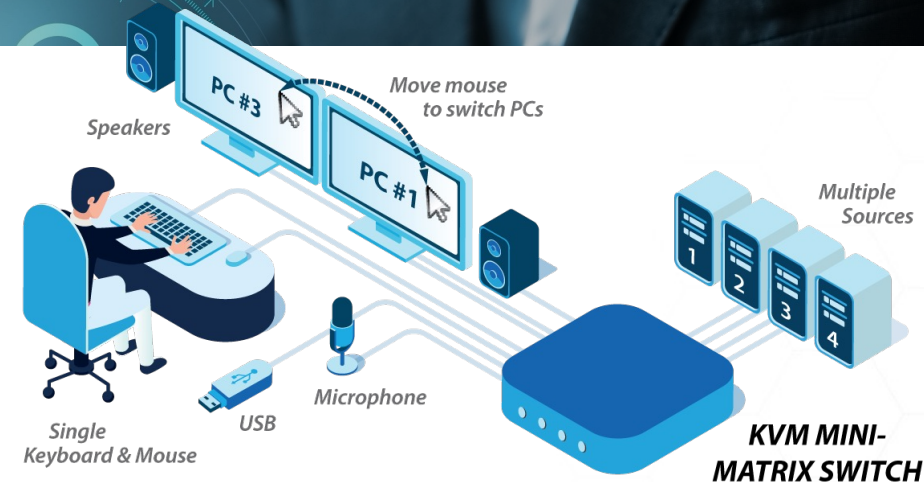


MINI-MATRIX SWITCH

A Mini-Matrix KVM is a keyboard-video-mouse switch for sharing one set of peripherals between all computers.

A Mini-Matrix KVM has the added functionality:

- View and control each of two selected computers on two displays - at the same time
- Easily switch peripheral control from one selected computer to another, by sliding the mouse cursor over the computer's display border. No need, unlike a KVM, to press the front-panel buttons to switch channels.



- ✓ 2, 4, and 8 host-port versions available; 2 console ports
- ✓ 4K UHD 3840 x 2160 @60Hz
- ✓ Filtered USB support
- ✓ USB 3.0 support (Commercial)
- ✓ Supports various display layouts
- ✓ Copy/Paste between sources (Commercial)
- ✓ Independently switch Video/USB/Audio/KB & Mouse
 - ✓ E.g. map card reader to one computer while viewing video from another.
- ✓ TEMPEST compliant version available

HSL has NIAP certified rugged, secure and commercial mini-matrix products.

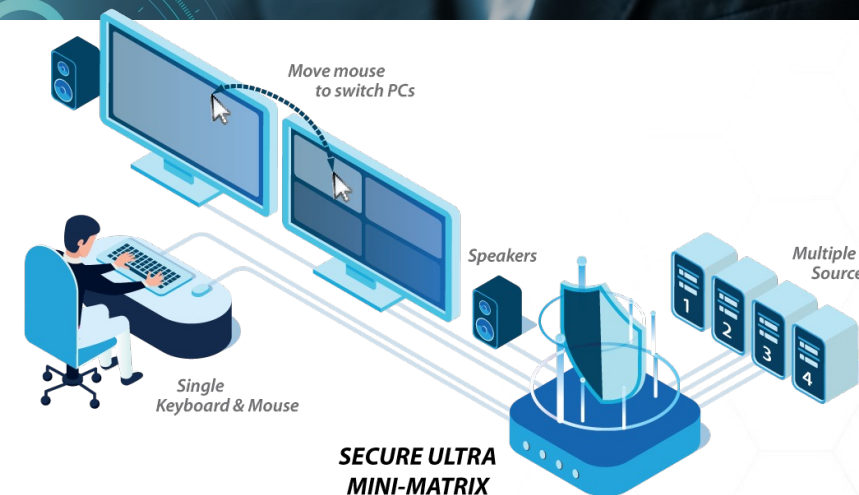
ULTRA MINI-MATRIX SWITCH

An Ultra Mini-Matrix is a multi-viewing KVM switch that enables users to control multiple computers through a single set of peripherals while maintaining maximum isolation between systems:

- View and control all connected computers across two displays, with preset viewing options to customize the layout and prioritize specific displays.
- Easily switch peripheral control between computers by sliding the mouse cursor over the border to other computers.
- Use keyboard hotkeys and the on-screen display configuration tool to change settings and customize the display, sources and peripherals.

- ✓ 4, and 8 host-port versions available; 2 console ports
- ✓ Dual 4K UHD 3840 x 2160 @30Hz support
- ✓ Filtered USB support
- ✓ Simultaneous viewing and control for multiple computers
- ✓ VDT Mouse navigation
- ✓ Multiple viewing modes

- ✓ Independently switch Video/USB/Audio/KB & Mouse
 - ✓ E.g., Map card reader to one computer while viewing video from another
- ✓ Complete isolation between computers and peripherals
- ✓ NIAP PP4.0 certified



HSL has NIAP certified rugged, secure and commercial mini-matrix products.

KVM COMBINER SWITCH

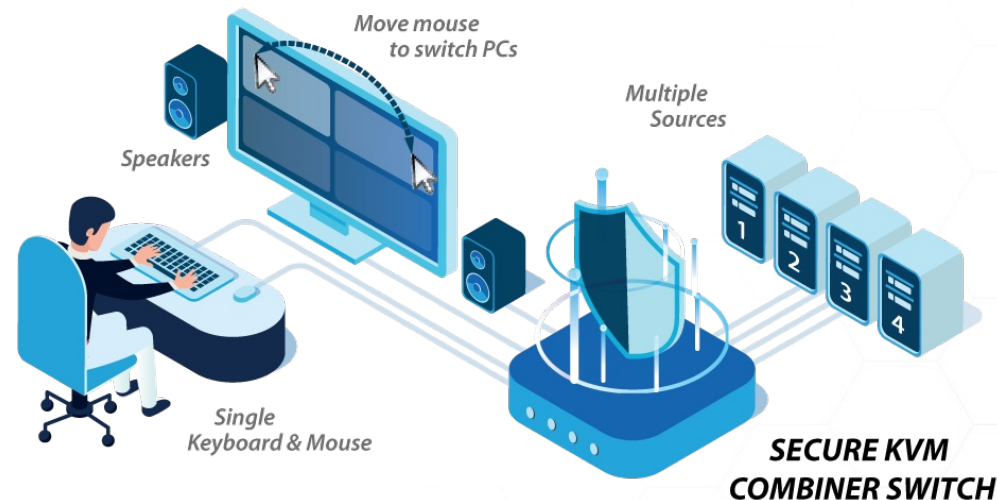
A KVM Combiner is a multi-viewing KVM switch where a user shares a single keyboard and mouse set to:

- Control all connected computers
- View the sources on one display (or two, in extended-view mode)

HSL's KVM Combiner combines a multi-viewer, a scaler, and a KVM switch into a single product.

Channel switching is done simply by dragging the mouse from window to window, with no need for push buttons or any other user interaction.

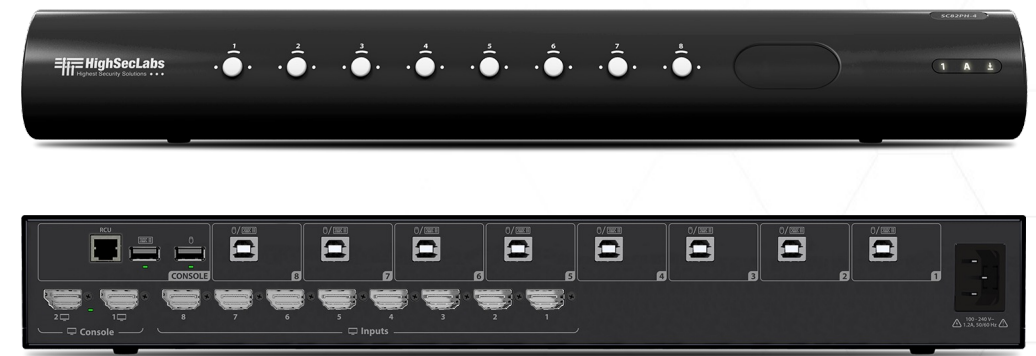
HSL has NIAP certified rugged, secure and commercial Combiner products.



KVM COMBINER SWITCH PORTFOLIO

- ✓ 2, 4, 8 and 16 (Secure)-port versions available;
2 console ports
- ✓ 4K UHD 3840 x 2160 @30Hz
- ✓ Filtered USB support
- ✓ USB 3.0 support (Commercial)

- ✓ Support various display layouts
- ✓ Copy/Paste between sources (Commercial)
- ✓ Freeze USB (Commercial)
- ✓ Freeze Audio
- ✓ Native touch-screen support



RUGGED KVM SUITE



- ✓ Fully rugged and designed for deployment in military vehicles and C2 centers.

Compliant to:

- MIL-HDBK-216
- MIL-STD-810
- MIL-STD-1275
- MIL-STD-461

- ✓ 65,000 hours MTBF

- ✓ Fully secure – No data leaks between channel-isolated sources

- Compliant with NIAP/Common Criteria PP4.0 for PSD (Peripheral Sharing Device)
- TEMPEST Level A compliant

- ✓ IP67 compliant illuminated buttons. NVG option available



KVM Switches



Matrix Switches

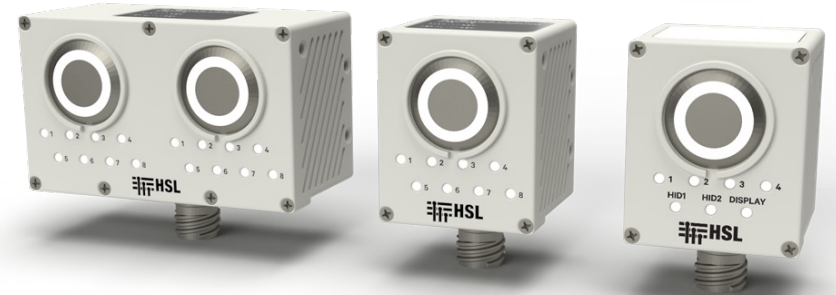


Combiner Switches

REMOTE CONTROLS



Secure



Rugged



Commercial

Thank You

For more info:



www.highseclabs.com | info@highseclabs.com

