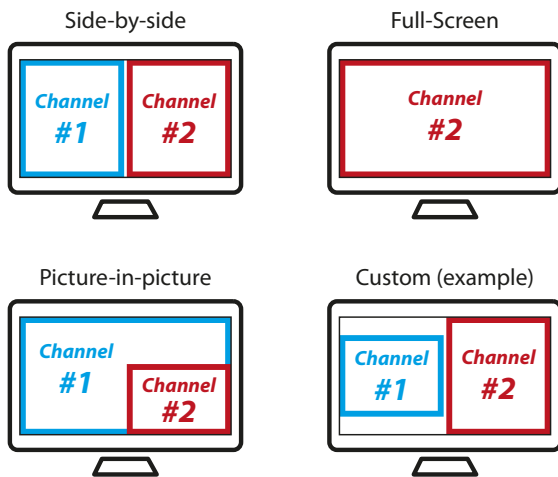# SECURE 2-PORT KVM COMBINER SWITCH

Interact with two computers presented on the same display at the same time using a single set of USB, audio, keyboard, video and mouse peripherals.

NIAP PP PSS 4.0 COMPLIANT COMMON CRITERIA

The KVM Combiner switch offered by HSL provides increased productivity in challenging multi-computer environments where users are required to view and interact with two computers at the same time.
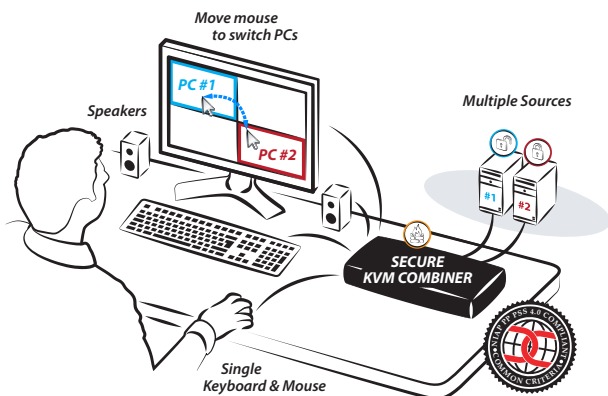
Optimize user experience while maintaining the highest isolation between computers and peripherals.
Obviate the need for purchasing and installing dedicated, per-computer peripheral sets.

KVM COMBINER HIGHLIGHTS

- **View and control two computers simultaneously**
  Present and work with 2 computers at the same time.

Side-by-side

Full-Screen

Channel #1 | Channel #2

Channel #2

Picture-in-picture

Custom (example)

Channel #1 | Channel #2

Channel #1 | Channel #2

2-Port Secure Combiner KVM Switch View Modes

HSL 2-Port Secure Combiner KVM Switch System Diagram

SECURITY FEATURES

- **USB Security**
  - Block unauthorized USB devices.
  - Allow only human interface devices (HID) e.g. keyboard and mouse.
- **Video Security**
  - Computer video input interfaces are isolated through the use of different electronic components, power and ground domains.
  - The display is isolated by a dedicated, read-only, EDID emulation for each computer.
  - Access to the monitor's Extended Display Identification Data (EDID) is blocked.
  - Access to the Monitor Control Command Set (MCCS commands) is blocked.
- **Keyboard & Mouse Security**
  - The keyboard and mouse are isolated by a dedicated, USB device emulation for each computer.
  - One-way, peripheral-to-computer data flow is enforced through unidirectional optical data diodes.
  - Communication from computer-to-keyboard/mouse is blocked.
  - Non HID (Human Interface Device) data transaction is blocked.
- **Audio Security**
  - Enforce computer-to-speaker, one-way flow of sound through unidirectional optical data diodes.
  - Prevent eavesdropping and line-in re-tasking by blocking speaker-to-computer communication.
- **Hardware Anti-Tampering**
  - Any attempt to open the product enclosure will activate an anti-tamper system making the product inoperable.
  - Blinking LEDs provide a clear indication of a tampering event.
  - Special holographic tampering evident labels on the product's enclosure provide a clear visual indication if the product has been opened or compromised.
- **Firmware Anti-Tampering**
  - There is no access to the product's firmware or memory through any port.
  - Firmware is permanently stored on a non-reprogrammable Read Only Memory (ROM) to prevent any modification.
  - Firmware integrity is verified through a self-test procedure during power-up. Upon detection of a critical failure the device disables normal operation and provides the user with a clear visual indication of failure.

OPERATIONAL HIGHLIGHTS

- **Smoothly switch between computers (Virtual Display Technology)**
  Automatically switch control from one computer to another by dragging the mouse cursor over the computer's display border. Peripherals switch to the next computer without having to press any buttons once the mouse is passing the display border.

- **Avoid typing mistakes**
  Since two-way communication is blocked by the KVM security, keyboard lock LEDs do not function. Help users avoid typing mistakes by visually indicating the status of keyboard locks (CAPS-LOCK | NUM LOCK | SCROLL LOCK) on the product's front facing panel.

- **Flexible screen layout**
  Determine how computer screens are presented on the combiner screen. Switch between Side-by-Side, Picture-in-Picture and Custom display layouts that fit user needs.

SC21H-4

SPECIFICATION

PART NUMBER	SC21H-4
No. of Sources	2
CONSOLE PORTS	
Displays	1 x HDMI 1.4
Max Output Resolution	Supporting resolutions up to 1900x1200
Mouse and Keyboard	USB Type A
Audio Jack	3.5 mm Jack
COMPUTER PORTS	
Display Type	1 x HDMI 1.4
Max Input Resolution	1920 x 1200
Mouse and Keyboard	USB Type B
Audio Jack	3.5 mm Jack
PHYSICAL	
Dimensions	177 x 82 x 35 mm / 6.9 x 3.2 x 1.3 inches
Weight	0.52 kg (1.1 lbs)
POWER	
Power Requirements	12V DC, 1.5A
AC Input	100 to 240V AC
Power Type	External
ENVIRONMENTAL	
Operating Temperature	32° to 104° F (0° to 40° C)
Storage Temperature	-4° to 140° F (-20° to 60° C)
Humidity	0-80% RH, non-condensing
SOFTWARE	
Supported OS	Windows, Linux, Mac
CERTIFICATION	
Security Certification	Compliant with NIAP Common Criteria PP4.0 for Peripheral Sharing Switch (PSS) devices
Product Certification	CE, RCM, FCC class B, VCCI, TUV US, TUV Canada
GENERAL INFO	
Made In	ISRAEL
Product life-cycle	10 years
Warranty	2 Years