



NIAP PP PSS 4.0  
COMPLIANT  
COMMON CRITERIA

# SECURE 4/8/16-PORT KVM COMBINER SWITCHES

Interact with multiple computers on one or two displays simultaneously while using a single keyboard and mouse set.

HSL's KVM Combiner are the perfect combination of a KVM Switch, Multi-viewer and a scaler. The HSL KVM Combiner allows users to easily interact with multiple computers simultaneously.

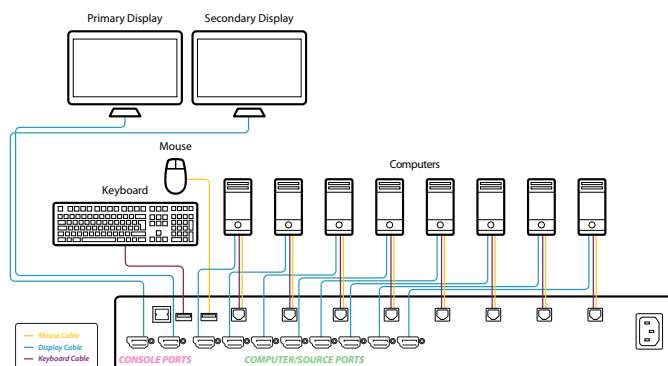
HSL's Combiner switch enables the user to:

- View all computers on one or two displays. The Combiner functions as a KVM switch, a scaler, and a multi-viewer – all in one.

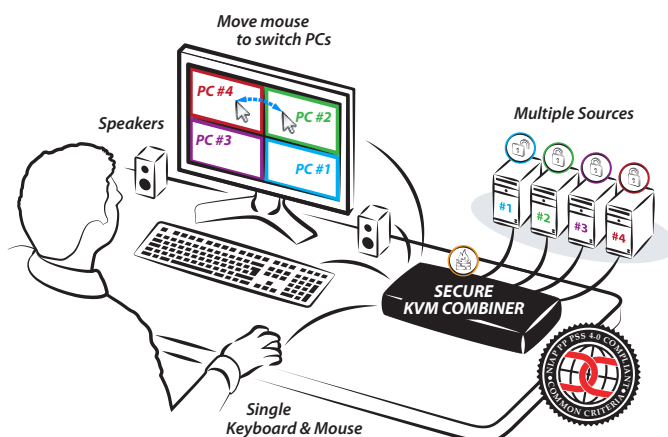
## KVM COMBINER HIGHLIGHTS

### View and control multiple computers simultaneously

With a single Combiner, you can view and control up to 16 computers at the same time.



HSL 8 Ports KVM Combiner with two connected displays



HSL 4-Port Secure Combiner KVM Switch System Diagram

- Switch the mouse and keyboard control freely between all computers.
- Create custom view modes and quickly switch between it for easy interaction with the environment.

## SECURITY FEATURES

- **Video Security**
  - Computer video input interfaces are isolated through the use of unique 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.
- **Dual Head Support**
  - support for dual head computer inputs connecting two sources to assure smooth mouse switching across all displays.
- **Keyboard and 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 activates 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.

SCAN  
QR CODE  
TO WATCH  
VIDEO



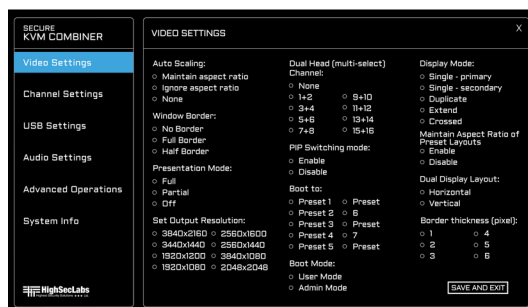
## OPERATIONAL HIGHLIGHTS

- 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. The peripherals then switch to the next computer – without the need to press any buttons.
- View applications in Ultra-High Definition (UHD) 4K video quality**  
 Never compromise on video quality. Run graphic-intensive, ultra-high definition applications on all single- and dual-monitor KVM models.
- Native touch-screen support**  
 Interact with all the computers connected to a KVM Combiner, using touch-screen gestures. No need to install drivers or software.
- Flexible screen layout**  
 Resize source scaling and aspect ratio, to create tile, scale, and custom display layouts that fit the user's needs. Supports screen-duplication and extended screen-view modes.
- Dual DisplayPort and HDMI connector**  
 Connect either DisplayPort or HDMI sources into the same port, with the new dual-source video connector. Eliminates the need for adapters and converters.
- State-of-the-art conversion scaler**  
 Rapidly convert any input and output resolution (up to 4K) to optimal quality display, on a 4K screen, using the built-in scaler.
- Extremely low latency viewing**  
 View the input channel with extra low latency – below 10ms – using the direct mode feature.

## SPECIFICATION

PART NUMBER	SC42PHU-4	SC82PH-4	SC162PH-4
<b>No. of Sources</b>	4	8	16
<b>CONSOLE PORTS</b>			
<b>Displays</b>	2 x HDMI	2 x DP/HDMI	2 x DP/HDMI
<b>Mouse and Keyboard</b>	USB Type A	USB Type A	USB Type A
<b>Audio Jack</b>	3.5 mm Jack	N/A	N/A
<b>fUSB Port</b>	USB Type A	N/A	N/A
<b>COMPUTER PORTS</b>			
<b>Display Type</b>	DP/HDMI	DP/HDMI	DP/HDMI
<b>Max Resolution</b>	Supporting UHD 4K resolutions up to 3840x2160		
<b>Mouse and Keyboard</b>	USB Type B	USB Type B	USB Type B
<b>Audio Jack</b>	3.5 mm Jack	N/A	N/A
<b>fUSB Port</b>	USB Type A	N/A	N/A
<b>PHYSICAL</b>			
<b>Dimensions</b>	342 x 148 x 42 mm / 13.4 x 5.8 x 1.6 in	439x250x58 mm / 17.3x9.8x2.3 in	439x222x89 mm / 17.3x8.7x3.5 in
<b>Weight</b>	1.61 kg (3.5 lbs)	3.7 kg (8.1 lbs)	7.0 kg (15.4 lbs)
<b>POWER</b>			
<b>Power Requirements</b>	35W Max		
<b>AC Input</b>	100 to 240V AC		
<b>Power Type</b>	Internal		
<b>ENVIRONMENTAL</b>			
<b>Operating Temperature</b>	32° to 104° F (0° to 40° C)		
<b>Storage Temperature</b>	-4° to 140° F (-20° to 60° C)		
<b>Humidity</b>	0-80% RH, non-condensing		
<b>SOFTWARE</b>			
<b>Supported OS</b>	Windows, Linux, Mac		
<b>CERTIFICATION</b>			
<b>Security Certification</b>	Compliant with NIAP Common Criteria PP4.0 for Peripheral Sharing Switch (PSS) devices		
<b>Product Certification</b>	CE, RCM, FCC class B, VCCI, TUV US, TUV Canada		
<b>GENERAL INFO</b>			
<b>Product Life-cycle</b>	10 years		
<b>Warranty</b>	2 Years		

### OSD - VIDEO SETTINGS



SC42PHU-4



SC82PH-4



SC162PH-4

