



## Product Highlights

- ❏ **Operates between Highest Security Level Gaps**  
Designed for safe isolation between *national security* and the *internet*. Common-Criteria EAL-7 certified.
- ❏ **Mouse controlled windowing** • Highly-intuitive and easy operation. Superior to any other switched KVM. Cursor based system mode to navigate between windows and resize windows.
- ❏ **Works simultaneously with 4 isolated networks** • User can work in a single window accessing 4 isolated networks having different security levels.
- ❏ **Peripherals security** • Full USB isolation through multiple isolated host emulators and data diodes. Data leakage protected by hardware.
- ❏ **Real-time and real quality** • No quality loss, latency, reduced colours. Fastest digital video processing technology available in any KVM today.
- ❏ **Easy customization** • Administrator mode enables easy customization of channels, colours, cursors, task-bar, background etc.
- ❏ **Controlled Copy-Paste** • Efficient and highly secured solution for Copy-Paste across different networks [Optional].
- ❏ **Highest security by design** • Designed by an agency to support isolation between national security network and the internet (maximum separation).
- ❏ **Integrated Thin-client channels** • Product can be ordered with 1-4 internal Linux based thin-clients.
- ❏ **TEMPEST** • Galvanic isolation of sources using high-speed opto-couplers. Advanced set of anti-tampering features [Optional].

## The Ultimate Secured KVM Solution

HSL's KVM Combiner is a unique solution for common security problem. This patented device enables computer users to work simultaneously in up to 4 isolated computers. While most secured KVMs in the market today enables the user to switch between the different environments the KVM Combiner patented technology enables intuitive and seamless work in windows environment.

## What is a KVM Combiner?

The KVM Combiner designed to enables the user to natively work in windowing environment across different security levels without exposing the organization to the risks of information leakage. The KVM Combiner device uses advanced video processing to draw a high resolution dynamic "mosaic" of images generated by different computer sources. Built-in video sources isolation forces unidirectional flow of data through the USB and DVI ports. The product was designed and certified to Common-Criteria EAL 7. It is the only product available in the market today that truly resolves (in hardware) the challenge of users working simultaneously in multiple networks having different security levels.



K400 KVM Combiner Specification	
<b>Input Ports</b>	<ul style="list-style-type: none"> <li>▪ 4 input ports from PC hosts / thin-clients</li> <li>▪ 4 x DVI-D Female connectors, 4 x 3ft DVI-D to DVI-D cables included</li> <li>▪ 4 x USB Type-B connectors, 4 x 3ft USB Type-B to USB Type-A cables included</li> <li>▪ 4 x Audio out 3.5 mm stereo jacks [Optional]</li> <li>▪ Galvanic ports isolation through opto-isolators and isolated power supplies [Optional]</li> <li>▪ Plug &amp; Play DDC support - 4 channels identified as standard Dell displays</li> </ul>
<b>Output ports (to display, keyboard and mouse)</b>	<ul style="list-style-type: none"> <li>▪ 1 set of output ports to display, keyboard, mouse</li> <li>▪ DVI-I Female connector</li> <li>▪ PS/2 keyboard connector (DIN-5)</li> <li>▪ PS/2 mouse connector (DIN-5)</li> <li>▪ 2 x USB Type-A jacks [Optional]</li> <li>▪ Audio out 3.5 mm stereo jack</li> <li>▪ Channels isolation – optical data-diode and 4 separate host emulators</li> </ul>
<b>User Functions</b>	<ul style="list-style-type: none"> <li>▪ Toggling between channel cursor and system cursor by mouse click</li> <li>▪ Cascading mode shows all channels</li> <li>▪ Help function with basic usage guidance</li> <li>▪ Vertical and horizontal scroll bars</li> <li>▪ Minimize to task-bar</li> <li>▪ Task-bar indicating channel colors</li> <li>▪ Mouse wheel toggles between active windows in system mode</li> </ul>
<b>Administrator settings</b>	<ul style="list-style-type: none"> <li>▪ Access secured by a key-lock</li> <li>▪ 4 Selectable system cursor pointers</li> <li>▪ 6 Selectable window border widths</li> <li>▪ 16 Selectable window border colors</li> <li>▪ 2 Selectable title-bar sizes</li> <li>▪ Customer defined background bitmap [Optional]</li> </ul>
<b>Video modes supported</b>	<ul style="list-style-type: none"> <li>▪ Input - 640x480, 800x600, 1024x768, 1280x1024</li> <li>▪ Output – 1680x1280 default. Other modes are optional up to 1920x1440</li> </ul>
<b>Power</b>	<ul style="list-style-type: none"> <li>▪ DC input 5V / 3A maximum</li> <li>▪ Wall-mounted power supply included 90-240V AC, DC to 400 Hz</li> </ul>
<b>Physical Characteristics</b>	<ul style="list-style-type: none"> <li>▪ Dimensions: 80(W)x158(D)x34(H) mm / 3.15(W)x6.22(D)x1.34(H) inch</li> <li>▪ Device weight: 1 Kg. (2.2 lbs.)</li> <li>▪ Shipping Weight: 5.85 Kg. (12.9 lbs.)</li> </ul>
<b>Environmental</b>	<ul style="list-style-type: none"> <li>▪ Temperature range: Operating - 0°C to 40°C (32°F to 104°F); Storage - -20°C to 60°C (-4°F to 140°F)</li> <li>▪ Humidity: Operating - 20 to 80% non condensing; Storage – 10 to 90% non condensing</li> <li>▪ Altitude: 0 to 20,000 ft</li> </ul>
<b>Regulatory Compliance</b>	<ul style="list-style-type: none"> <li>▪ Safety: UL/cUL60950, EN60 950</li> <li>▪ EMI/EMC: FCC Class B, CE Mark, EN55022B, VCCI</li> </ul>
<b>Security Accreditations</b>	<ul style="list-style-type: none"> <li>▪ Common Criteria EAL-7 approval</li> <li>▪ TEMPEST Level 1 [Optional]</li> </ul>
<b>Warranty</b>	3 years

- Specifications are subjected to change without prior notice
- Multiple patents pending