

## Secure KVM Combiners Quick Start Guide

### Models:

- K404F** – Secure KVM Combiner, 4-Port, DVI-D Video
- K424F** – Secure KVM Combiner, 4-Port, Dual Display, DVI-D Video
- K404D** – Secure KVM Combiner, 4-Port, DisplayPort Video



HSL Secure KVM Combiner enables simple integration of four sources into a combined image presented on single/dual display/s. It is an essential tool for heavy-duty users required to work simultaneously with multiple isolated networks. This guide instructs how to install, configure, and operate the HSL KVM Combiner.

## 1. Installation

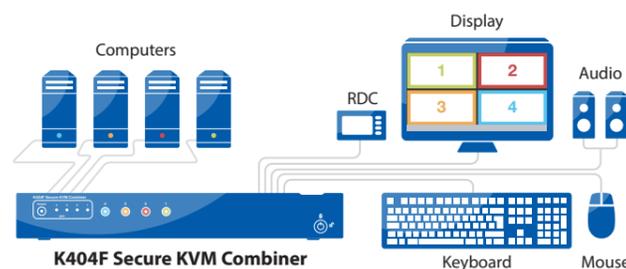
Connect the following items to the console/computer ports of the KVM Combiner:

- 1.1 Connect video, keyboard, mouse and speakers/headphones to relevant console ports.
- 1.2 Using USB/Video cables connect each computer video, keyboard and mouse ports to the input ports on the switch. If the computer uses audio output, e.g. speakers/headphones, connect audio cable from its audio output port to the corresponding audio input port on the KVM Switch.

**Note:** It is highly recommended to use Combiner with the supplied 5-button mouse.

- 1.3 If the computer uses a smart card reader/USB device (DPP-enabled), connect a USB cable between the computer and the corresponding DPP port on the KVM Combiner and connect the smart card reader/USB device to the console DPP port.
- 1.4 Connect power supply.

Combiner system diagram in tile mode



## 2. Setup

### 2.1 Default View after boot:

The combiner will boot for approximately 30 seconds and enter User mode in Tile View, showing an image of all connected computers in equally presented panes on Combiner Display/s.

#### Note:

**In User mode:** All ports (mouse, keyboard, audio, DPP) are mapped to the active computer and no setup menu is available.

**In System mode:** A gray task bar appears at the bottom of the screen and setup menus are available for configuration. The mouse has a unique appearance, blue by default, and is mapped to operating the task bar.

### 2.2 Switch to System mode:

In order to define combiner settings, switch from User mode to System mode in one of the following ways:

- Press display uppermost right corner continuously for 4 seconds
- Use keyboard shortcut **CTRL | CTRL | O**
- Click mouse left side button

### 2.3 Configure settings:

- Insert administrator key into the front-panel key hole and turn clockwise to the 15:00 o'clock position
- On system gray menu click Setup and select System menu. The System menu enables to configure mouse cursor & task bar appearance for System mode; pane frame appearance, resolution/s best supported on display/s used with the KVM Combiner, dual-display "Extend" or "Duplicate" modes, and more.
- On system gray menu click Setup and select Channel Menu to select for every channel the maximum resolution of source and its pane frame color.

**Note:** It is recommended to use the same resolutions for all combiner displays and connected computers. In case the resolutions are not identical, there may be various viewing problems that need to be resolved by defining appropriate resolutions in the System menu and in the connected computers.

- When finished configuring settings, turn the key counter-clockwise to 12 o'clock position. Remove the key and store it in a location that is accessible to the network administrator.

### 2.4 Configure custom viewing presets:

- It is possible to define up to 4 Custom Presets in addition to Scale mode, which is fixed.
- To define a custom preset arrange the panes as required and in System menu hold the mouse for a few seconds on preset Keys 1, 2, 3 or Tile.
- To view the presets, click **CTRL | CTRL | F1-F4**. F1 to F3 will show the presets for 1 to 3, and F4 will show the custom preset for Tile mode.

**Note:** When a custom Tile mode is used and you wish to view default Tile mode, i.e. 4 panes equally sized on display, use **CTRL | CTRL | Q**.

### 2.5 Switch to User mode to start working:

- Hold uppermost right corner of display for 4 seconds
- Use keyboard shortcut **CTRL | CTRL | U**
- Click mouse left side button

## 3. Basic Operation

The KVM Combiner shows up to four computers in panes on one or two connected displays. It can be operated via using touch screen tapping move note to end of the sentence after "keyboard shortcuts".

**Note:** Supported models manufactured by ELO, LG, Dell, Samsung and Sharp.

### 3.1 Working with a single display

#### Tile Mode

Shows the output of four computers in equally sized panes.



	Touch Screen	Keyboard	Mouse
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**To switch to Tile mode** Touch "Tile" on taskbar **CTRL | CTRL | Q** click "Tile" on the taskbar

**Move pane in Tile mode**

Tap upper left corner of a specific pane to move it



N/A

Press and hold Left-Click Mouse button to move pane

**Resize pane in Tile mode**

Tap the lower right corner of a specific pane and drag to resize. Note: the content will not resize with pane.

To fit content use **CTRL | CTRL | W**



**CTRL | CTRL | W:** Fit content to resized pane

Press and hold Right-Click Mouse button to resize pane.

**Scale pane in Tile mode**

Tap the midpoint of the vertical or horizontal pane borders and drag to scale. The window and the content will resize.



**CTRL | CTRL | "-" :** Reduce Scaling  
**CTRL | CTRL | "+" :** Increase Scaling

Press and hold Side mouse button + Scroll wheel to reduce/increase scaling.  
For Fast scaling use mouse Side button & Scroll wheel while holding pressed Left CTRL button

#### Scale Mode

shows the output of four computers, displaying one large primary pane at 75%, and three smaller panes scaled to 25% of display area.



	Touch Screen	Keyboard	Mouse
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**To switch to Scale mode** Tap "Scale" on taskbar **CTRL | CTRL | S** click "Scale" on taskbar

#### Full-Screen

enlarges the active pane to full screen.

	Touch Screen	Keyboard	Mouse
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**Enlarge pane to full screen** In Tile mode tap 4 times on pane to switch to Full screen mode. Tap again 4 times to switch back to Tile mode **CTRL | CTRL | F:** Full Screen **CTRL | CTRL | Z:** Goes back to last layout before switching pane to Full Screen Double Left-Click Mouse button in System mode

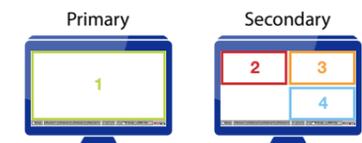
**Note:** When in Full screen, switch back to Tile or Scale to show the other panes.

### 3.2 Working with dual Displays (K424F)

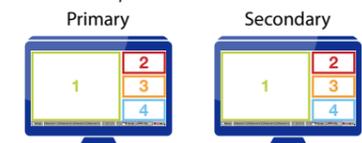
When connecting combiner to two displays you may work in "Extend" or "Duplicate" mode.

"Duplicate" shows the same image on both displays. "Extend" mode expands working area showing the image on both displays.

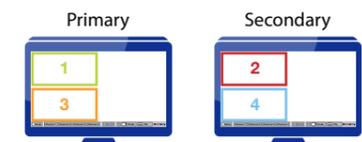
"Extend" in Scale Mode



"Duplicate" in Scale Mode



"Extend" in Tile Mode



"Duplicate" in Tile Mode



**Note:** These modes can be applied with any of the resolutions listed. If none of these modes "Extend" or "Duplicate" is defined in the System Setup Menu, the image will be displayed on one of the displays and the other one will remain blank, as with working with a single display.

## 4. List of Available Actions

KVM Combiner in User mode can be controlled via touch screen, mouse clicks and keyboard shortcuts.  
In System mode only mouse clicks and keyboard shortcuts are available.

Action	Touch screen	Keyboard	Mouse
<b>Define Custom Presets in System mode</b>	N/A	<b>CTRL   CTRL   F1-F4</b> <b>Note: CTRL   CTRL   F4</b> sets the custom preset for Tile mode. <b>CTRL   CTRL   Q</b> will always show the default Tile mode with 4 equally sized panes in display	N/A
<b>Toggle between System Mode and User Mode</b>	Hold uppermost right corner of display for 4 seconds	Move to System mode: <b>CTRL   CTRL   O</b> , Move to User mode: <b>CTRL   CTRL   U</b>	Press Side Mouse Button
<b>Move between sources (1 to 4) – change active pane</b> <b>Note:</b> sources can also be switched by using the Combiner front panel push buttons	Tap pane to select and interact with a specific pane In Scale mode Tap any of the small panes on the right to make them primary	<b>CTRL   CTRL   Channel # (1-4)</b>	In System mode select 1-4 buttons in bottom grey menu In User mode press on any of the panes In Tile mode use Scroll Wheel Mouse button
<b>Move to Tile</b>	In Scale mode click 4 times on primary pane to move to Tile mode	<b>CTRL   CTRL   Q</b>	In System mode Select Tile button in bottom grey menu
<b>Move to Scale</b>	In Tile mode hold lower right corner of display for 4 seconds to move to Scale mode	<b>CTRL   CTRL   S</b>	In System mode Select Scale button in bottom grey menu
<b>Scale panes</b>	Touch the midpoint of the vertical or horizontal pane borders and hold while scaling. The window and the content will resize.	<b>CTRL   CTRL   "-"</b> : Reduce Scaling <b>CTRL   CTRL   "+"</b> : Increase Scaling	Press and hold Side mouse button + Scroll wheel to reduce/increase scaling. For Fast scaling use mouse Side button & Scroll wheel while holding pressed Left CTRL button
<b>Move/drag panes</b>	In Tile mode touch the upper left corner of a specific pane to move it	N/A	Left-Click Mouse button

Action	Touch screen	Keyboard	Mouse
<b>Resize pane</b>	In Tile mode touch the lower right corner of a specific pane to resize window without fitting the content. To fit content use CTRL   CTRL   W	<b>CTRL   CTRL   W</b> : Fit the desktop to the resized pane	Press and hold Right-Click Mouse button to resize pane. Maybe only part of the desktop will be displayed (see mouse actions for further resize options).
<b>Enlarge pane to full screen</b>	In Tile mode tap 4 times on pane to move to Full screen mode In Full screen mode tap 4 times to move to Tile mode	<b>CTRL   CTRL   F</b> : Full Screen <b>CTRL   CTRL   Z</b> : Goes back to last layout before enlarging pane to Full Screen	Double Left-Click Mouse button in System mode
<b>Connecting Secondary Display in Duplicate Mode</b>	N/A	<b>CTRL   CTRL   F11   L</b>	N/A
<b>Controlling Content and Order of Displays in Extend Mode</b>	N/A	<b>CTRL   CTRL   F11   J   J</b> – Primary display is presented on both displays <b>CTRL   CTRL   F11   K   K</b> - Secondary display is presented on both displays <b>CTRL   CTRL   F11   K   J</b> – Switch positions between Primary and Secondary displays. <b>CTRL   CTRL   F11   J   K</b> - Switch positions back between Primary and Secondary displays. <b>Note:</b> • J stands for Primary display. • K stands for Secondary display.	N/A
<b>Presentation Mode -define a channel that will always appear in Full Screen once selected</b>	N/A	<b>CTRL   CTRL   P</b> to enter mode <b>CTRL   CTRL   X</b> (X=Channel # 1-4), for example channel #1. Channel 1 will be displayed in full screen <b>CTRL   CTRL   Channel # other than X</b> , e.g. channel #2, will move back to Tile Mode <b>CTRL   CTRL   N</b> To move out of Presentation Mode	N/A
<b>Operate applications in a specific active pane in User mode</b>	Normal touch screen behavior	Normal keyboard behavior	Normal mouse behavior