



Models:

SC21H-M – Secure 2-Port HDMI Video KVM Combiner, M-Line

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INTRODUCTION

HSL Secure 2-Port KVM Combiner Switch

HSL's Secure 2-Port KVM Combiner enables viewing and controlling **two** computers:

- On the **same** display
- Using a **single** set of keyboard, mouse, USB, and audio peripherals

HSL's KVM Combiner is the only product that combines a scaler, multi-viewer, KVM switch, and video-wall controller - built into one.

The KVM Combiner was built according to multiple international-security standards. These assure total isolation. So, no data leaks between the two connected computers, via the switch or the connected peripherals.

This guide tells you how to install, operate, and configure an HSL Secure 2-Port KVM Combiner.

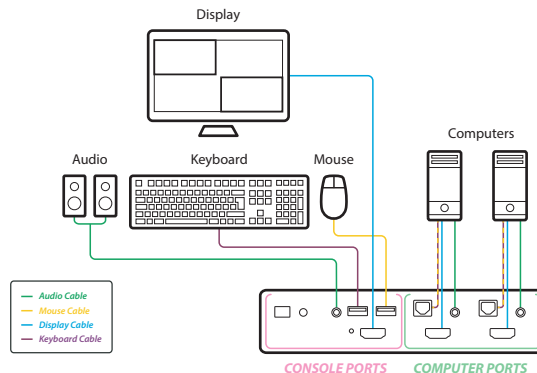
INSTALLATION

Installing the Combiner

Step 1 – Combiner Installation

1. Verify that all peripherals and computers are turned OFF before connecting them to the Combiner.
2. To the Combiner's Console ports, connect the keyboard, display, mouse, and audio peripherals.
3. To the Combiner's computer ports - for each of the two computers - connect the keyboard, display, mouse, and audio cables. Make sure that each computer cable is connected to the same computer-port group.

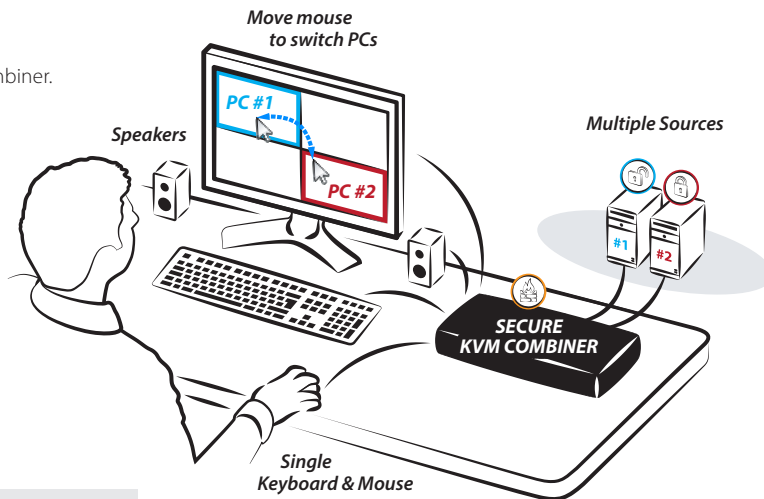
Note: The two computers are represented by push buttons on the product's front panel. Once the Combiner is powered ON, you can switch peripherals between the computers, by pressing either button.



INSTALLATION

Step 2 – Power ON the Combiner

1. Turn ON both PCs.
2. Connect the power supply and power ON the Combiner.
The Combiner boots up, as follows:
 - If you are using the Combiner for the first time, the default display mode is picture-in-picture (PiP).
 - Otherwise, the Combiner boots into the display mode used during the previous power on, including either:
 - Full-screen - either channel #1 only or channel #2 only
 - Picture-in-picture (PiP)
 - Side-by-side
 - Custom mode



Note: In case no picture is presented after powering on the Combiner, connect an alternate display to the combiner's display console port, or perform a reset to factory default.

OPERATION

Operation Modes Overview

The Combiner operates in two modes:

- **User mode (default)** - User mode is the KVM Combiner's normal use mode. User mode lets you:
 - Change between a wide variety of display layouts
 - Switch mouse-and-keyboard control between the two computers
- **Admin mode** - Admin mode is the KVM Combiner's configuration mode. Admin mode lets you set, for example, the:
 - Combiner resolution
 - Custom channel window size and layout
 - Channel frame and title display
 - Channel aspect ratio

Operating in User Mode

The User mode (default) is the KVM Combiner's normal use mode.

To enter User mode, press: Left Ctrl | Left Ctrl | u

Note: To clear all settings and restore the device to its original configuration, press: **Left Ctrl | Left Ctrl | F11 | r**

This section shows you how to:

- Change between a wide variety of display layouts
- Switch mouse-and-keyboard control between the two computers

OPERATION

Selecting Display Layouts

There are four display modes available in User mode:

- Full-screen
- Side-by-side
- Picture-in-picture (PiP)
- Custom

Full-Screen Mode

In full-screen mode, only one of the two computers is displayed (in full-screen).

To display in full-screen mode:

- Press: **Left Ctrl | Left Ctrl | z**
This displays Channel #1 in full-screen mode.



- Then, to swap Channel #2 into full-screen mode, press: **Left Ctrl | Left Ctrl | w**



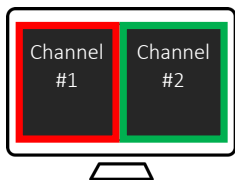
OPERATION

Side-By-Side Mode

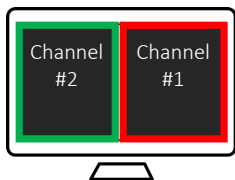
In side-by-side mode, one computer is displayed on the LEFT, and the other, on the RIGHT.

To display in side-by-side mode:

1. Press: **Left Ctrl | Left Ctrl | s**
This displays Channel #1 ,on the LEFT and Channel #2, on the RIGHT.



2. Then, to swap positions, press: **Left Ctrl | Left Ctrl | w**

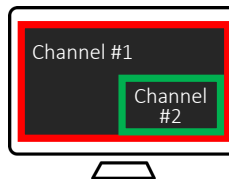


Picture-In-Picture Mode

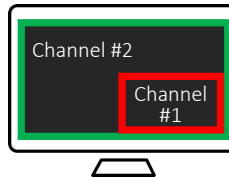
In picture-in-picture (PiP) mode, one computer is displayed full-screen, while the other is displayed as a floating small-sized window, in the lower right-hand corner.

To display in picture-in-picture mode:

1. Press: **Left Ctrl | Left Ctrl | p**
This displays Channel #1, in full-screen and Channel #2, as a small window.



2. Then, to swap positions, press: **Left Ctrl | Left Ctrl | w**



OPERATION

Custom Mode

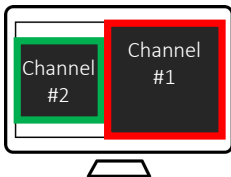
Custom mode lets you display a pre-configured custom-designed layout.

Note: To learn how to configure a custom-designed layout and save it as a preset for future use, see the Main Menu Options section.

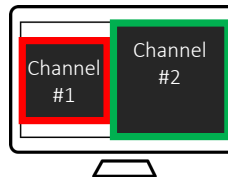
To display the Custom-mode display preset:

1. Press: **Left Ctrl | Left Ctrl | c**

Here is an example of a possible Custom-mode-display preset:



2. Then, to swap positions, press: **Left Ctrl | Left Ctrl | w**
For the example above, Channels #1 and #2 swap places.



OPERATION

Switching Channel Control

To eliminate the need to press the Combiner's front-panel buttons, you can switch between channels, using:

- Mouse movement
- Keyboard shortcuts

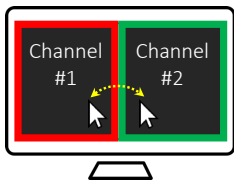
Switching Channel Control - Using a Mouse

In User mode, you can switch keyboard-and-mouse control - from one computer to the other - by simply dragging the mouse cursor over the computer's channel window border.

For example:

1. Display channels in side-by-side mode, by pressing:
Left Ctrl | Left Ctrl | s
2. Now, move the mouse cursor between Channels #1 and #2, to freely switch keyboard-and-mouse control.

Note: This works in all other display modes.



Switching Channel Control - Using Keyboard Shortcuts

In User mode, you can switch keyboard-and-mouse control -from one computer to the other - by using the following keyboard shortcuts:

- To switch control to Channel #1, press:
Left Ctrl | Left Ctrl | 1
- To switch control to Channel #2, press:
Left Ctrl | Left Ctrl | 2, OR –
- To swap between channels, press:
Left Ctrl | Left Ctrl | w

Note: This works in all display modes.

OPERATION

Configuring the Settings - in Admin Mode

The Admin mode lets you set, for example, the channel:

- Display resolution
- Window size and layout
- Frame and title display
- Aspect ratio

In Admin mode, the mouse CANNOT be used to control the computers (this is done in User mode).

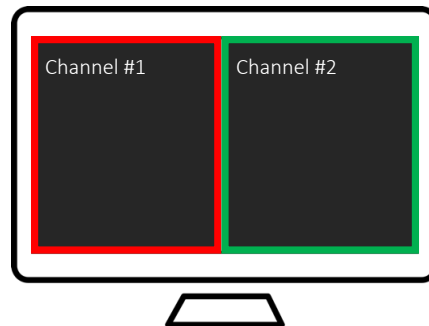
Note: To clear all settings and restore the device to its original configuration, press: **Left Ctrl | Left Ctrl | F11 | r**

To enter Admin mode, press:

Left Ctrl | Left Ctrl | o

To let you know that you are in Admin mode (NOT in User mode), the:

1. "Admin Mode" title appears on the lower-left-screen corner
2. Screen channel numbers appear on the upper left-hand corner of each channel's window frame
3. Cursor frame's border color turns RED



Important Notes:

1. Always use the left control key (Ctrl) unless otherwise specified.
2. Do not use the numeric keypad for toggling shortcuts, unless otherwise specified.
3. All keyboard shortcuts refer to QWERTY keyboards. For non-QWERTY keyboards, keep using the QWERTY layout. For example, in an AZERTY keyboard, where the letter **A** is equivalent to the location of the letter **Q** on a QWERTY keyboard, type { **Ctrl | Ctrl | a** } to switch to tile view.

OPERATION

On-Screen Display Modes

The Channel and Main display modes determine how channel windows are presented on the Combiner screen.

- **Channel menu:** Lets you change the frame, title, and aspect ratio as well as letting you swap between display modes.
- **Main menu:** Lets you change the channel resolution, switch between display modes, and set the Custom-mode-display preset.

OPERATION

Channel Menu Options

This section explains how to use the Channel menu options.

Note: To clear all settings and restore the device to its original configuration, press: **Left Ctrl | Left Ctrl | F11 | r**

- To access the channel menu options:
- Go into Admin mode: **Left Ctrl | Left Ctrl | o**
Within the channel you want to configure, right-click on any area inside the window.
The Channel menu opens:

```
Swap Inputs
Show / Hide Frame
Show / Hide Title
Aspect Ratio On / Off
System Menu
Save
```

- Left-click on the desired option (explained in the table below).

Option	Action
Swap Inputs	Swaps the channel windows' positions. (Same as Left Ctrl Left Ctrl w)
Show / Hide Frame	For the selected channel, shows or hides the colored channel frame. After setting, click Save .
Show / Hide Title	For the selected channel, shows or hides the channel window title. After setting, click Save . [Note: Changing the title text requires accessing the terminal-mode options explained in the HSL Secure Products Administrator Guide .]
Aspect Ratio On / Off	For the selected channel: <ul style="list-style-type: none"> Once ON, the computer screen aspect ratio is kept inside the channel window. Once OFF, the computer screen ratio is stretched to fit the entire channel window size (might distort the picture). After setting, click Save .
System Menu	Opens the Main menu options.
Save	Saves the above settings.

OPERATION

Main Menu Options

This section explains how to use the Main menu options.

Note: To clear all settings and restore the device to its original configuration, press: **Left Ctrl | Left Ctrl | F11 | r**

To access the Main menu options:

1. Go into Admin mode: **Left Ctrl | Left Ctrl | o**
2. Right-click on any area on the screen. The Channel menu opens:

Swap Inputs
Show / Hide Frame
Show / Hide Title
Aspect Ratio On / Off
System Menu
Save

3. Left-click on the System Menu option. The Main menu opens:

1080 -> 1920x1200
Full Screen Mode
PiP Mode
Side-By-Side Mode
Custom Mode
Save

4. Left-click on the desired option (explained in the table below).

Option	Action
1080 -> 1920x1200	Select one of the two screen resolutions from the list.
Full-Screen Mode	Maximizes channel #1 to full-screen. Note: To swap full-screen view to channel #2, press: Left Ctrl Left Ctrl w
Picture-in-Picture (PiP) Mode	Maximizes the Channel #1 screen while presenting Channel #2 screen as a floating small-sized-window (picture-in-picture). Note: To swap positions between Channel #1 and Channel #2, press: Left Ctrl Left Ctrl w
Side-By-Side Mode	Aligns two source screens side-by-side, with Channel #1, on the LEFT and Channel #2, on the RIGHT. Note: To swap positions between Channel #1 and Channel #2, press: Left Ctrl Left Ctrl w
Custom Mode	To reposition and resize channel the windows' layout to create a Custom preset: <ol style="list-style-type: none"> 1. Select Custom Mode. The current custom-layout preset is displayed. 2. To change each channel's position – click the left mouse button, and hold a channel window frame to drag it to a new position. 3. To resize each channel's window size - select a channel window and scroll the mouse middle button up or down to resize it. To force: <p>Horizontal resize: Align the channel window to the bottom-screen area.</p> <p>Vertical resize: Align the channel window to the right.</p> 4. Save layout using the Save option below. Note: To display the Custom-Mode display preset, press: Left Ctrl Left Ctrl c
Save	Saves the Custom-mode layout. Note: To display the saved Custom-mode-display preset, press: Left Ctrl Left Ctrl c

OPERATION

Additional Settings

To configure additional settings, refer to the HSL Secure Products Administrator Guide.

For example, for each channel window, you can set:

- The frame width
- The frame color
- The window's title text label
- To show or hide the frame
- To show or hide the title



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