

1 How is the Sequoia 4K60 being used (Sequoia 4K60 Display Modes)

Quad Multiview + Workstation

In **Quad Multiview + Workstation** mode, the Sequoia 4K60 outputs a quad-multiview image from the HDMI out port 1, and four single-view fullscreen source signals from the other HDMI output ports, with scaling and seamless switching.

The first output can also output a fullscreen image, and any of the single-view outputs (except the 5th output) can also show a duplicate of the first output image.

This mode is excellent for KVM multiview, multiple-user multi-touch, multiple-user KVM workstations, single-user KVM workstations, and more.



If the unit does not appear to be in **Quad Multiview + Workstation** mode, connect a mouse and keyboard to one of the USB-A ports and press **Alt – q – w** (one key at a time) to change the display mode to Quad with Workstation.

Dual Independent Quad Multiview + Bypass

In **Dual Independent Quad Multiview + Bypass** mode, the Sequoia 4K60 outputs a quad-multiview image from the HDMI out port 1, a duplicate of the port 1 image from HDMI out port 2, a second independent quad from HDMI out port 3, and a duplicate of the port 3 image from HDMI out port 4. HDMI out ports 2 and 4 can also show a single image bypass of any of the sources.

This mode is excellent for KVM multiview, dual-user multi-touch, dual-user KVM workstations, and more.



If the unit does not appear to be in **Dual Independent Quad Multiview + Bypass** mode, connect a mouse and keyboard to one of the USB-A ports and press **Alt – q – q** (one key at a time) to change the display mode to Dual Quad.

Seamless Switching

In Seamless Switching mode, the Sequoia 4K60 outputs four single-view images from each of the HDMI out ports 2 through 5, with seamless switching on each of the connected display devices.

If the unit does not appear to be in **Seamless Switching** mode, connect a mouse and keyboard to one of the USB-A ports and press **Alt – s – s** (one key at a time) to change the display mode to Seamless Switching.



To switch sources, there are three methods:

- 1) On a monitor connected to HDMI output 1, use a mouse or touchscreen to click-and-drag a source to a destination.
- 2) Use the keyboard to press **Ctrl – Monitor ID – Input ID** (for example, if you want input 3 on monitor 2, press **Ctrl – 2 – 3**).
- 3) Use the web graphical user interface (GUI) or HTTP Commands – to open the web-GUI, please refer to the note on the right, or reach out to Avitech support for more information and assistance.

Web-browser Graphical User Interface (GUI)

To access the web-browser GUI for more advanced functions, connect the Sequoia 4K60 IP port to a computer using an Ethernet cable.

Make sure the computer is on the same subnet as the Sequoia 4K60 (factory default IP address is **192.168.0.5**), open a web browser such as Google Chrome, Mozilla Firefox, Apple Safari, or Microsoft Edge, and enter **"192.168.0.5"** in the web browser address bar.

Log in to control the unit with the factory default password **"admin"**.

Video Wall Control

In **Video Wall Control** mode, the Sequoia 4K60 can control up to four display devices as a video wall.

It provides the ability to switch any source to any display, stretch one source image across some or all displays, overlay windows to have picture-in-picture, flexible free-scaling windows, crop any source image, and save and easily activate user presets.

If the Sequoia 4K60 does not appear to be in **Video Wall Control** mode, connect a mouse and keyboard to one of the USB-A ports and press **Alt – v – w** (one key at a time) to change the display mode to Video Wall.

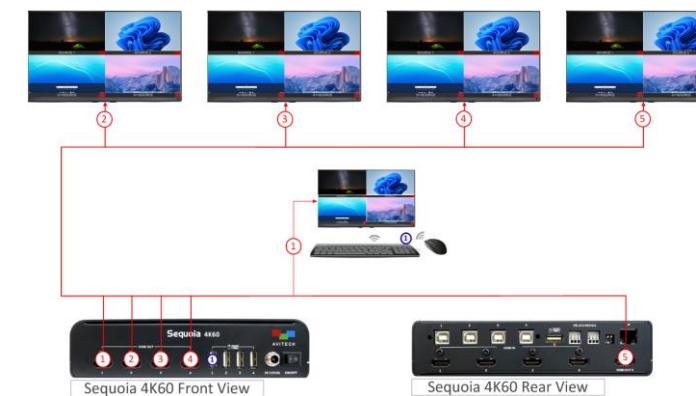


To control the video wall created by the Sequoia 4K60 and the display devices, use the web graphical user interface (GUI) or HTTP Commands.

Synchronized Duplication

In **Synchronized Duplication** mode, the Sequoia 4K60 outputs a quad-multiview image from the HDMI out port 1, a duplicate of the port 1 image from HDMI out port 2 that can be a different output resolution, and a duplicate of the port 2 image from HDMI out port 3 – 5. This mode is excellent for KVM multiview presentation applications and for meeting different display device requirements. The operator can manually synchronize all the outputs (after changing the layout) or synchronize automatically.

If the unit does not appear to be in **Synchronized Duplication** mode, connect a mouse and keyboard to one of the USB-A ports and press **Alt – q – d** (one key at a time) to change the display mode to quad multiview.



Presentation

In **Presentation** mode, the Sequoia 4K60 can control up to four display devices in a presentation application.

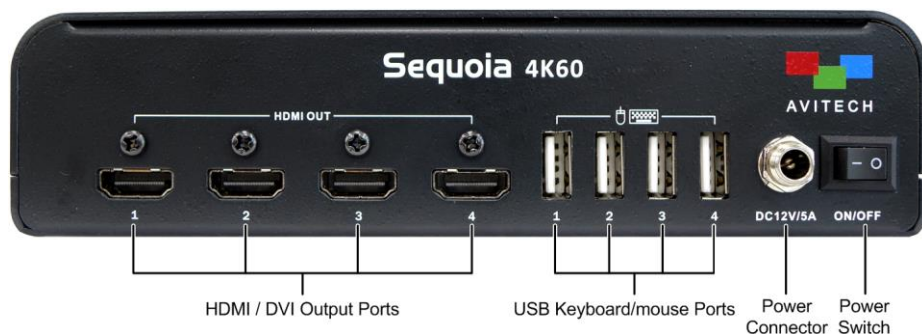
If the Sequoia 4K60 does not appear to be in **Presentation** (PiP) mode, where there is real time multiview preview on the HDMI out port 1, independent dual-view with window overlay and PiP on the HDMI out ports 2 and 4, and duplicate dual-view on the HDMI out ports 3 and 5, connect a mouse and keyboard to one of the USB-A ports and press **Alt – p – p** (one key at a time) to change the display mode to Presentation (PiP).



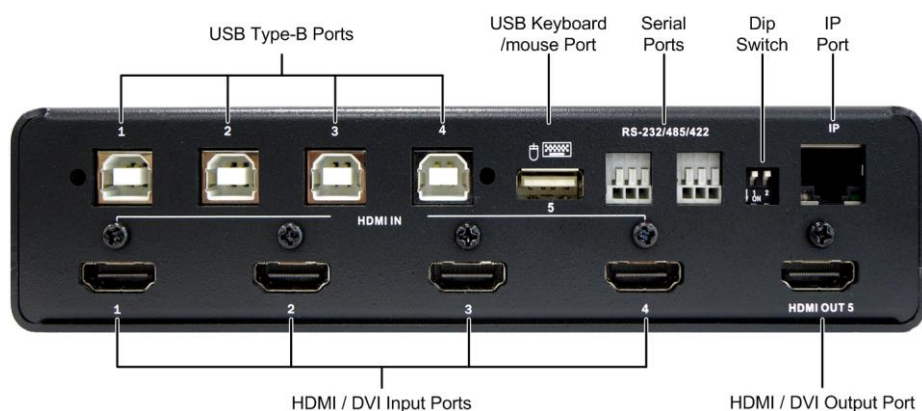
To control the Sequoia 4K60 in presentation mode, use the web graphical user interface (GUI) or HTTP Commands. To open the web-GUI, please refer to the note below, or reach out to Avitech support for more information and assistance.

2 Front / Rear Components

Sequoia 4K60 Front Components



Sequoia 4K60 Rear Components



3 Operating Modes


Host Operation Mode

When the Sequoia 4K60 is in the **Host** operation mode, the mouse cursor is controlled by a local mouse device connected to the primary Sequoia device. There is a **Host** cursor to control all the position and size of up to four remote computers.

Double-click the mouse scroll wheel or press Pause/Break to enter **Host** operation mode (When using a keyboard without “Pause/Break” key, use “**control + option (Alt) + shift + p**”).

Remote Operation Mode


When the Sequoia 4K60 is in the **Remote** operation mode, the mouse cursor and keyboard is used to control a specific computer connected to the Sequoia 4K60.

Double left-click a window or click the  icon in the pop-up menu to enter **Remote** operation mode and control a specific computer.












4 Using the Keyboard and Mouse

Pop-up Selections

Move the **Host** cursor onto a window and the following pop-up menu will appear on the top-right corner:

On a computer window in quad-view display: 

On a computer window in full screen mode: 

-  : denotes swap window
-  : denotes entering a computer window to control the computer (**Remote** mode)
-  : denotes switching to display Input 1's source
-  : denotes switching to display Input 2's source
-  : denotes switching to display Input 3's source
-  : denotes switching to display Input 4's source
-  : denotes switching to quad-view display
-  : denotes full screen
-  : denotes return from full screen
-  : denotes switching the source to display on HDMI OUT 2's monitor (only applying for the 1st quad view in **Dual Independent Quad Multiview + Bypass mode**)
-  : denotes switching the source to display on HDMI OUT 4's monitor (only applying for the 2nd quad view in **Dual Independent Quad Multiview + Bypass mode**)

Using the Mouse

Double-click the window of a computer you want to control.


Window Resizing –

Move the mouse cursor to the edge of the window and drag the border of a window to a desired size.

Window Repositioning –

Click and drag a window to a new position.

Window Position/Size Locking –

Move the **Host** cursor to the top-left corner of the display until the cursor becomes , then click to lock the window's position and size. Repeat these steps to unlock the layout.

Window Closing –

Move the **Host** cursor on a specific window, then double-click the mouse right button to close this window.



Window Adding –

Move the **Host** cursor to a blank area, then click and drag the left mouse button to draw a rectangle, and the newly added window will appear on the display.

Window Swapping –

Move the **Host** cursor to the top right corner of a window and left click the capital letter **S** to change the mouse cursor to a capital letter **S**. Move the **Host** cursor (still a capital letter **S**) to destination window and click the left button to swap the two windows.


Full Screen Window –

Move the **Host** cursor to the top right corner of a window and left click the  icon. The window will maximize to full screen. To return to quad-view display, move the **Host** cursor to the top right corner of a window and left click the  icon.

Surfer Mode Switching –

Click the back-button on a mouse to toggle the “Surfer” feature on or off. Alternatively, use a keyboard to press **Ctrl + Alt + Shift + F8**.

Access a Remote Computer –

Method 1: Move the **Host** mode cursor to the top right corner of the remote computer window and left click the  icon. The remote computer will now be controlled by the mouse and keyboard.

Method 2: Double-click the mouse when the **Host** mode cursor is on the remote computer window. The remote computer will now be controlled by the mouse and keyboard.

Using the Keyboard Hotkeys

Use the following hot keys only in the **Host** operation mode. The input letter is not case sensitive.

Keys	Function
Ctrl –	Sets a particular input to full screen mode (e.g., Ctrl – 2 – 3 would set input 3 on monitor 2 to display in full screen mode).
Monitor ID – Input ID	<i>Note: These hotkeys are available for the ports marked HDMI OUT 1 – 5 in Quad + Workstation or Dual Quad or Seamless Switching mode of Sequoia 4K60.</i>
Home	Returns the four windows to its default Quad-view layout.
Ctrl –	Returns to the multiview display layout before fullscreen mode (this hotkey is only available for HDMI OUT 1 in Workstation (default) mode).
q (ID 1 – 4)	<i>Note: This hotkey is only available for the port marked HDMI OUT 1 in Quad + Workstation mode or in Dual Quad mode of Sequoia 4K60.</i>
Ctrl + s	Saves the display configuration as the latest preset to the Sequoia 4K60 so that on the next boot-up the latest preset will be loaded.
PageUp/ PageDown	Switches between the three factory-default layout presets.
↑	Loads the previous user-created preset file.
↓	Loads the next user-created preset file.
password	Enter the “ kmlock ” to toggle the mouse/keyboard function disable/enable. The default password is kmlock (all lower-case), you can change the password through Web browser GUI → User Accounts page.
s-blank – Enter (lower-case)	To toggle off/on all of the display monitors connected to Sequoia 4K60. Upon using keyboard hotkey “ s-blank ”, then press Enter to turn off / on all the display monitors.
s-blank#(Output ID) – Enter (lower-case)	To toggle off/on a specified display monitor connected to Sequoia 4K60. For example, pressing “ s-blank2 ”, then press Enter will turn off / on the display monitor connected to the port marked HDMI OUT 2 .
Alt + L	To toggle lock/unlock the current windows layout, and disables any adjustment of window size and position made by the Host cursor.
Ctrl + Alt + Shift + T	To manually synchronize the duplicate image with the HDMI out port 1. <i>Note: This hotkey is only available for the port marked HDMI OUT 1 in Synchronized Duplication mode of Sequoia 4K60.</i>

4 Using the Keyboard / Mouse (Cont.)

Changing the Display Configuration Mode (hotkeys) –

Keys	Function
Alt – q – w	To switch display configuration to Quad + Workstation mode (Quad-view on the 1 st HDMI OUT and single-view fullscreen on 2 nd – 5 th HDMI OUT with scaling)
Alt – q – q	To switch display configuration to Dual Quad mode (Independent quad-view on the 1 st and 3 rd HDMI OUT, duplicate quad-view on 2 nd and 4 th HDMI OUT, and single-view fullscreen on 5 th HDMI OUT)
Alt – q – d	To switch display configuration to Synchronized Duplication mode (quad-view on all HDMI OUT, duplicate quad-view on the 2 nd – 5 th HDMI OUT but can have different output resolution from the 1 st HDMI OUT)
Alt – s – s	To switch display configuration to Seamless Switch mode (Real time multiview preview on 1 st HDMI OUT and single-view fullscreen on the 2 nd – 5 th HDMI OUT capable of seamless switching).
Alt – v – w	To switch display configuration to Video Wall mode (a 2x2, 1x2, 1x3, 1x4 video wall, with image overlay and PiP of up to two image layers per output)
Alt – p – p	To switch display configuration to Presentation (PiP) mode (Real time multiview preview on 1 st HDMI OUT and independent dual-view on 2 nd and 4 th HDMI OUT, and duplicate dual-view on 3 rd and 5 th HDMI OUT).

Use the following hot keys only in the **Remote** operation mode.

Keys	Function
Pause Break	Exit from the Remote operation mode to the Host operation mode. <i>Note: When using a keyboard without “Pause/Break” key, use “control + option (Alt) + shift + p” instead to perform the Remote mode to Host mode switch.</i>
Ctrl + Alt + Shift + F8	Toggles the “Surfer” feature on or off; when “Surfer” feature is on, moving the mouse cursor past a window border shared with another computer will cause the Sequoia’s (Host) keyboard and mouse to control the other computer.
Ctrl – 1 – # (window ID 1 – 4)	To set a window to display on the monitor connected to port marked HDMI OUT 1 in fullscreen mode. (i.e. “Ctrl – 1 – 1” will set window 1 to display in fullscreen mode; “Ctrl – 1 – 3” will set window 3 to display in fullscreen mode) <i>Note:</i> 1. When window was hidden from display, the hidden window cannot be set to fullscreen mode when using this hotkey. 2. This hotkey is only available for the port marked HDMI OUT 1 in Quad + Workstation or in Dual Quad mode of Sequoia 4K60.
Ctrl – 3 – # (window ID 1 – 4)	To set a window to display on the monitor connected to port marked HDMI OUT 3 in fullscreen mode. (i.e. “Ctrl – 3 – 1” will set window 1 to display in fullscreen mode; “Ctrl – 3 – 3” will set window 3 to display in fullscreen mode) <i>Note:</i> 1. When window was hidden from display, the hidden window cannot be set to fullscreen mode when using this hotkey. 2. This hotkey is only available for the port marked HDMI OUT 3 in Dual Quad mode of Sequoia 4K60.
Ctrl – 1 – Q	Resume to quad multiview display layout before fullscreen mode. <i>Note: This hotkey is only available for the port marked HDMI OUT 1 in Quad + Workstation mode or in Dual Quad mode of Sequoia 4K60.</i>
Ctrl – 3 – Q	Resume to quad multiview display layout before fullscreen mode. <i>Note: This hotkey is only available for the port marked HDMI OUT 3 of Sequoia 4K60 in Dual Quad mode.</i>
Ctrl – # (HDMI OUT ID 2 – 5) – # (Input ID 1 – 4)	To route an input source to display on the monitors connected to the ports marked HDMI OUT 2 and HDMI OUT 3 . (i.e. “Ctrl – 2 – 1” will set input source 1 to display in fullscreen mode on HDMI OUT 2 ; “Ctrl – 3 – 2” will set input source 2 to display in fullscreen mode on the monitor connected to HDMI OUT 3). <i>Note: These hotkeys are available for the ports marked HDMI OUT 2 – 5 in Quad + Workstation or Dual Quad or Seamless Switching mode of Sequoia 4K60.</i>
password	Enter the “ kmlock ” to toggle the mouse/keyboard function disable/enable. The default password is kmlock (all lower-case), you can change the password through Web browser GUI → User Accounts page.

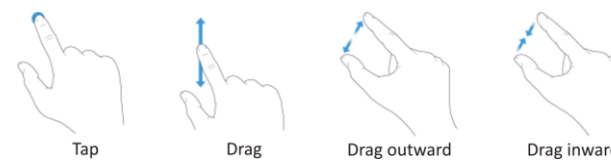
Keys	Function
s-blank – Enter (lower-case)	To toggle off/on all of the display monitors connected to Sequoia 4K60. Upon using keyboard hotkey “s-blank”, then press Enter to turn off / on all the display monitors.
s-blank#(Output ID) – Enter (lower-case)	To toggle off/on a specified display monitor connected to Sequoia 4K60. For example, pressing “s-blank2”, then press Enter will turn off / on the display monitor connected to the port marked HDMI OUT 2 .

- ⚠ 1. A defined hotkey combination with a plus symbol (“+”) means the keys joined by a plus symbol need to be pressed and held, before pressing the last key.
2. A defined hotkey combination with a dash symbol (“-”) means the keys need to be pressed and released before pressing and releasing another key.

5 Touchscreen Basic Operation

Move/Resize Window

A few simple gestures – tap, drag, and pinch – are all you need to use a touchscreen with the Sequoia 4K60.



Window Repositioning –

Use one finger to tap-and-drag a window to a desired position.

Window Resizing –

Use two fingers to tap-and-drag (pinch) inward to make a window smaller or tap-and-drag (pinch) outward using two fingers to make a window bigger.


Window Closing –

Use three fingers to tap-and-drag (pinch) inward to close a window.



Window Adding –

Use one finger to tap-and-drag within the blank area to add a window to the desired position. Note that the newly added window cannot be initially overlaid with the other windows.

Window Swapping –

Tap once on a window and when a pop-up menu appears on the top-right corner; tap the  icon. Then tap anywhere within another window to swap the two windows, including the label’s positions. The image size may change according to the two windows’ former size.

Full Screen Window –


Tap once on a window and when a pop-up menu appears on the top-right corner; tap the  icon and then the window will maximize to full screen. Alternatively, tap the  icon to return from full screen to the quad-view display.

Or use two fingers to tap on a particular window and hold for approximately 2 seconds, and the window will maximize to full screen. When in fullscreen mode, use two fingers to tap and hold for approximately 2 seconds to return to quad-view display.

5 Touchscreen Basic Operation (Cont.)

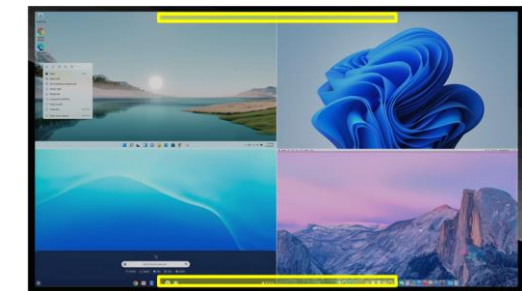
Access a Remote Computer –

Method 1: Double-tap on a window to enter the remote computer mode to control the source computer.

Method 2: Tap once on a window and when a pop-up menu appears on the top-right corner, then tap the  icon.

Return to Host mode –

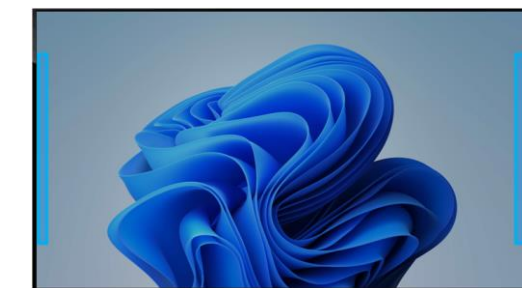
To exit from **Remote** operation mode back to **Host** operation mode, press within a half-inch of the upper or lower edges of the touchscreen (as shown by the yellow boxes in the figure below) and hold for approximately 2 seconds.



Switch Control (Cycle) Between Full Screen Windows –

To switch windows (cycle) while in full screen **Remote** operation mode; press within half inch of the left or right edges of the touchscreen (as shown by the blue boxes in the figure below) and hold for approximately 2 seconds.

- Cycle Forward:** press **right** side of screen:
window 1 → window 2 → window 3 → window 4 → window 1
- Cycle Backward:** press **left** side of screen:
window 1 → window 4 → window 3 → window 2 → window 1

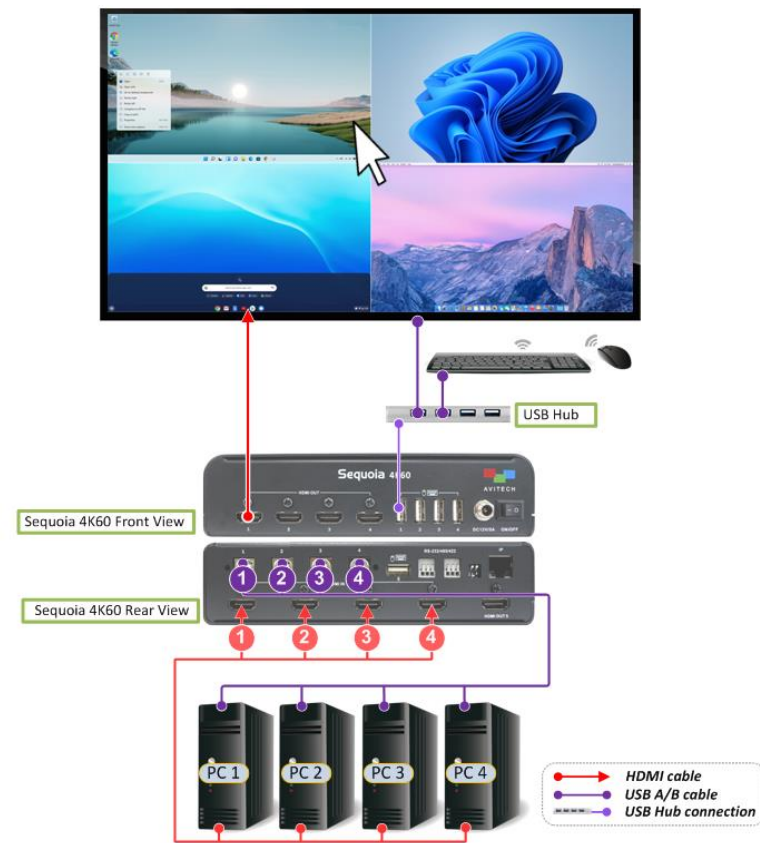


Returns to Default Layout –

To switch the four windows’ size and position back to the default layout (only available in **Host** mode), press within the area shown in below figure and hold for approximately 2 seconds.

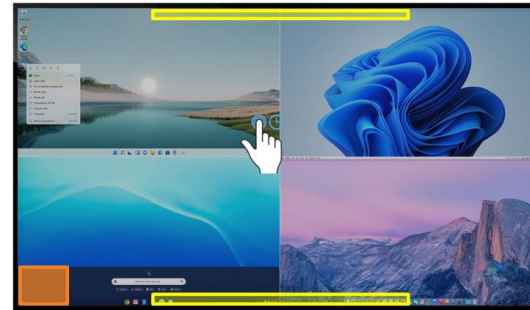


6 Example Setup (The following figure shows a typical setup with an Avitech Sequoia 4K60 device connected to four computer systems and a touchscreen display device)

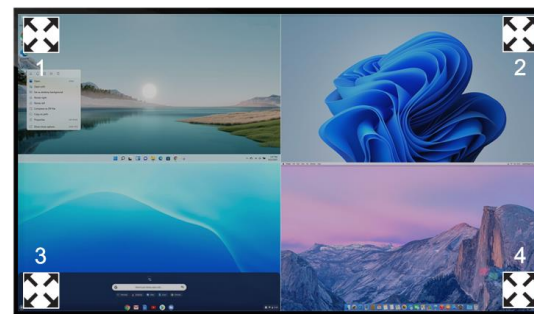


1. Connect one end of the USB A/B cable to the USB Type-B port marked **1** on the rear panel of Sequoia 4K60. Connect the other end to the first computer's USB Type-A port. Connect USB A/B cables to the USB Type-B ports marked **2 / 3 / 4** on the rear panel of Sequoia 4K60 and the other end of the cables to the second / third / fourth computer's USB Type-A ports.
2. Connect one end of the HDMI signal cable to the port marked **HDMI IN 1** on the rear panel of Sequoia 4K60. Connect the other end to the first computer's HDMI / DVI (a DVI-to-HDMI adapter or converter may be required) port. Connect another HDMI signal cable to the port marked **HDMI IN 2** connector on the rear panel of Sequoia 4K60 and the other end to the second computer's HDMI / DVI port. Repeat as needed for the third and fourth computer.
3. Connect one end of the HDMI signal cable to the port marked **HDMI OUT 1** on the front panel of Sequoia 4K60. Connect the other end to the touchscreen display device's HDMI port.
4. Connect a USB hub to the USB Type-A port marked **1** on the front panel of Sequoia 4K60. Then connect one end of the USB A/B cable to the USB Type-B port to the touchscreen display device and connect other end to the USB hub.
5. Connect the mouse and keyboard devices to the USB hub.

6. Connect a 12 V DC power adapter to Sequoia 4K60.
7. Press the power switch to the **ON** position of Sequoia 4K60. The image will be displayed on touchscreen display device after around 100 seconds.
8. Turn on power for the four computers and the touchscreen display device.
9. When using the touchscreen display device with the Sequoia 4K60 for the very first time, or upon resetting your Sequoia 4K60 to the default state, you may need to calibrate the touchscreen. Press **Ctrl + t** on the keyboard or tap and hold anywhere (except the spaces outlined in yellow shown in the figure below) for 7 seconds, and a symbol will appear in the top left corner.



Use your fingertip or a stylus to tap and continue pressing on the center of the symbol for approximately five (5) seconds or until the next symbol appears on the top right corner. Use your fingertip or a stylus to tap and press, and repeat these steps with the symbols that appear on the lower left corner and lower right corner of your monitor display.



10. Upon completing touchscreen calibration, tap anywhere on the touchscreen display device or press the **Pause/Break** key and the mouse pointer will appear on touchscreen display device.

11. The mouse will be in **Host** operation mode by default. Tap anywhere within a computer source image window and the pop-up menu will appear – tap the symbol, and you will now be able to use the mouse or keyboard hotkeys to perform various tasks within the computer source, in **Remote** operation mode.

You can also double tap or double click on a computer source image to change from **Host** operation mode to **Remote** operation mode.

To change from **Remote** operation mode to **Host** operation mode, press within a half-inch of the upper or lower edges of the touchscreen (as shown on page 3) and hold for approximately 2 seconds, or use a mouse to double click the mouse wheel, or use a keyboard to press **Pause/Break**.

The Sequoia 4K60 is compatible with the following operating systems:

Windows OS: 98 Special Edition, 2000 Professional, XP, Vista, Server 2003, Server 2008, Windows 7, Windows 8, Windows 10.

Linux OS: Fedora 10, Ubuntu 8.1, Scientific 5.2, RedHat, Mint 6.0, Debian 5.0, PC Linux OS 2009, SUSE 11.1, Mandriva 2009, CentOS 5.2

Mac OS: O/S X 10.5 or later version only.

NOTE: Windows NT is currently not supported.