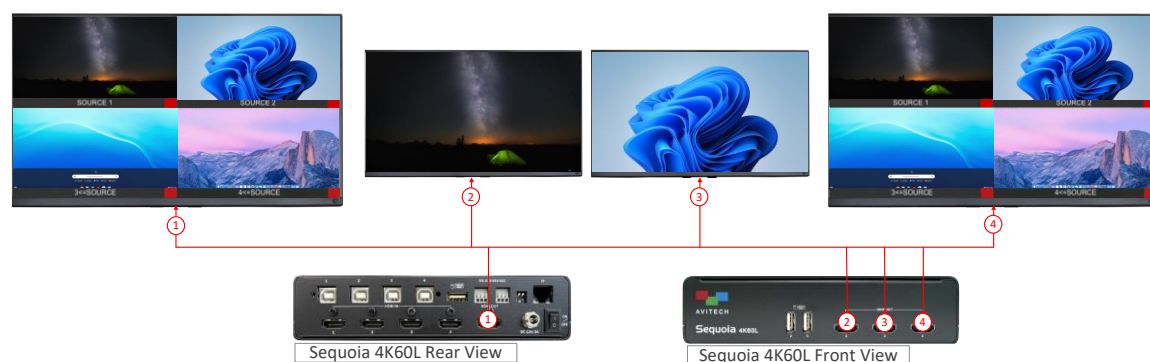**AVITECH®**

1 How is the Sequoia 4K60L being used (Sequoia 4K60L Display Modes)

Quad Multiview + Bypass (Daisy Chain Capable)

In Quad + Bypass mode, the Sequoia 4K60L can output a quad-multiview image from the HDMI out port 1 on the rear panel, two single-view pass-through source signals from the two HDMI output ports on the front panel, and a duplicated quad on the fourth output. You can fullscreen any of the sources in the quad-multiview images to make it a single-view image.

This mode supports multiview (up to 16 windows with daisy-chain), multi-touch control, single-user KVM workstation, and more.

Sequoia 4K60L Rear View   Sequoia 4K60L Front View

If the unit does not show a quad-multiview on the monitor connected to HDMI output port 1, connect a keyboard to one of the USB-A ports and press **Alt – q – b** (one key at a time) to change the display mode to Quad + Bypass.

Daisy Chain –

Multiple Sequoia 4K60L units can be daisy chained to display up to 16 source images on one display. To daisy chain multiple Sequoia 4K60L units follow the steps below:

1. Move the dip switch 1 to the on (down) position for all the Sequoia 4K60L units.
2. Power on the primary Sequoia 4K60L unit alone, and using the web GUI, make sure the IP address of the primary unit is set to a unique IP address, different from the factory default IP address, which is 192.168.0.5. Then power off the primary unit. Note the new IP address of the primary unit so that the web GUI can be accessed.
3. Connect the **HDMI OUT** port 1 of the secondary Sequoia 4K60L unit(s) to the input ports of the primary Sequoia 4K60L.
4. Repeat step 1 for all secondary Sequoia 4K60L units.
5. Connect all Sequoia 4K60L units to an Ethernet switch and connect the **HDMI OUT** port 1 of the primary Sequoia 4K60L to the display device's HDMI in port, as shown in the diagram.
6. Once all those connections are made and the primary unit IP address is changed to a unique IP address, power on all units, making sure to power on the primary unit last. Wait about 100 seconds for the units to auto-configure in daisy chain mode before using the mouse and keyboard or web graphical user interface (GUI) to change any windows or layouts.
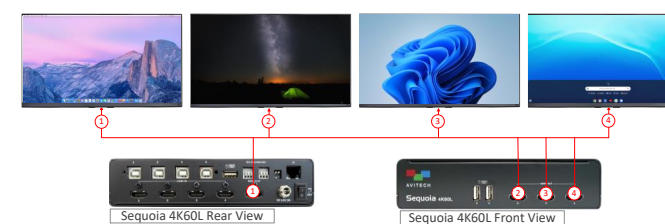

The primary Sequoia 4K60L has three HDMI outputs on its front panel that can duplicate the image from the HDMI OUT port 1 on the rear panel, as shown in the figure on the right.

Note: two Sequoia 4K60L units daisy chained can display up to 7 source images, three units daisy chained can display up to 10 source images, four units daisy chained can display up to 13 source images, and five units daisy chained can display up to 16 source images.

Single-View Seamless Switching

In Seamless Switching mode, the Sequoia 4K60L outputs four single-view images from each of the HDMI out ports on the rear and front panels, 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.
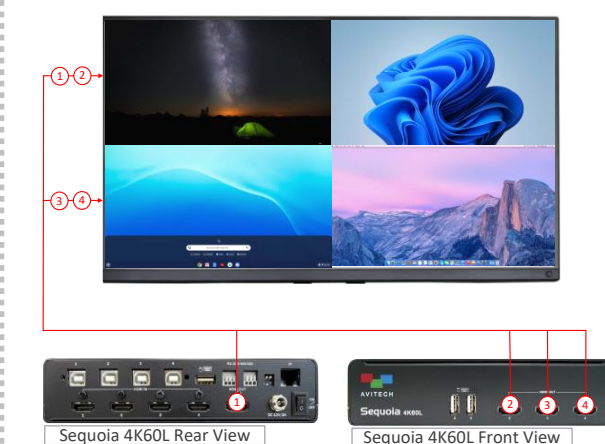

Sequoia 4K60L Rear View   Sequoia 4K60L Front View

To switch sources, there are three methods:

1) Use the keyboard to press **Ctrl – Monitor ID – Input ID** (for example, if you want input 3 on monitor 2, press **Ctrl – 2 – 3**).

2) Use the mouse to move the cursor to the top-right corner of the window, and the following pop-up menu will appear:

: 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

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.

Video Wall Control

In Video Wall mode, the Sequoia 4K60L can control up to four display devices as a video wall, with the ability to switch any source to any display and stretch one source image across all displays.

If the Sequoia 4K60L does not appear to be in Video Wall 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.

Sequoia 4K60L Rear View   Sequoia 4K60L Front View

To control the video wall created by the Sequoia 4K60L and the display devices, 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.

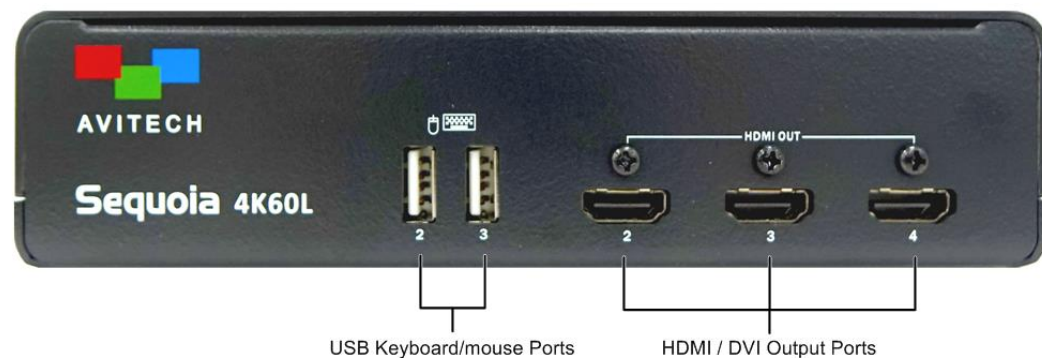### Web-browser Graphical User Interface (GUI)

To access the web-browser GUI for more advanced functions, connect the Sequoia 4K60L 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.
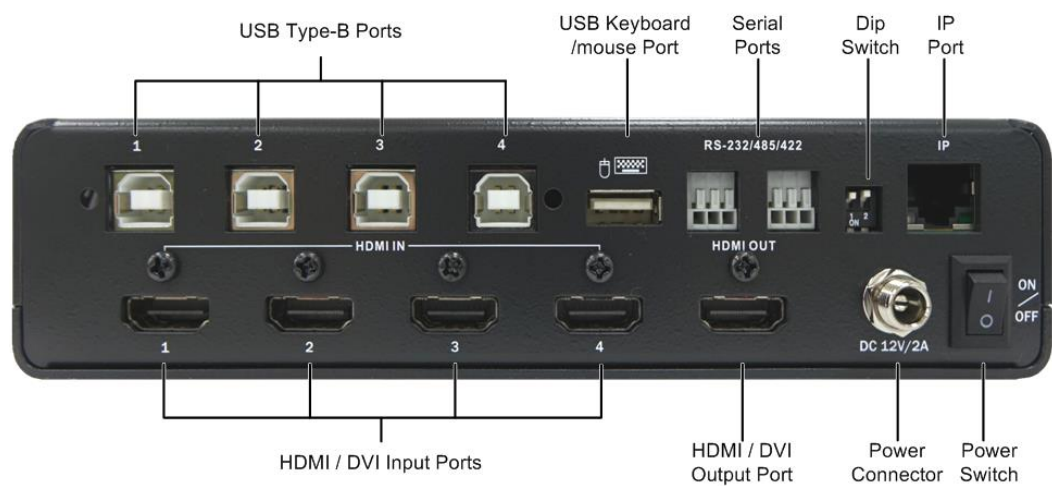
Log in to control the unit with the factory default password "admin".

Sequoia 4K60L Front Components

USB Keyboard/mouse Ports   HDMI / DVI Output Ports

Sequoia 4K60L Rear Components

USB Type-B Ports   USB Keyboard /mouse Port   Serial Ports   Dip Switch   IP Port

HDMI / DVI Input Ports   HDMI / DVI Output Port   Power Connector   Power Switch

Host Operation Mode

When the Sequoia 4K60L 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, press and hold the keys "control + option (Alt) + shift + p").

Remote Operation Mode

When the Sequoia 4K60L is in the **Remote** operation mode, the mouse cursor and keyboard is used to control a specific computer connected to the Sequoia 4K60L.

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

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: ↻ ▣ ⦂ ⊡2 ⊡3

On a computer window in full screen mode: ↻ ▣ 1 2 3 4 ⊞ ↔

↻ : denotes swap window

▣ : denotes entering a computer window to control the computer (**Remote** mode)

1 : denotes switching to display Input 1's source

2 : denotes switching to display Input 2's source

3 : denotes switching to display Input 3's source

4 : denotes switching to display Input 4's source

⊞ : denotes switching to quad-view display

⦂ : denotes full screen

↔ : denotes return from full screen

⊡2 : denotes switching the source to display on HDMI OUT 2's monitor

⊡3 : denotes switching the source to display on HDMI OUT 3's monitor

Using the Mouse

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 Closing –

Move the **Host** cursor on a specific window, and 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.

Load Default Layout –

Double-click the mouse scroll button to cycle switch between the three default layout files.

Lock Layout Position and Size –

Move the **Host** cursor to the top left corner of the display until the cursor becomes "𝕃", then click to lock the layout. Repeat these steps to unlock the layout.

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 multiview 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.

Cropping Image –

Move the **Host** mode cursor to the image window that you want to crop and press the keyboard hotkey "**Ctrl + c**", and the image will become fullscreen and a green frame will be displayed on the screen. Click and drag a rectangle to move the cropping area, as outlined by the green frame. You can use the mouse or keyboard to adjust the borders of the green frame.

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 – Monitor ID – Input ID	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).
Home	Returns the four windows to its default Quad-view layout.
Ctrl – 1 – q	Returns to the multiview display layout before fullscreen mode (this hotkey is only available for HDMI OUT 1 in Workstation (default) mode).
Ctrl + s	Saves the display configuration as the latest preset to the Sequoia 4K60L 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.
Shift + # (window ID) **– #** (Input ID)	Routes an input source to display on another window in the HDMI output port **1**, i.e. "**Shift + 2 – 1**" will route input source **1** to display on window **2**; "**Shift + 3 – 4**" will route input source **4** to window **3**). *Note: Must use the right Shift key on the keyboard. For use with multiview screen only in Quad Multiview + Bypass (Daisy Chain Capable) mode.*
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 4K60L. Upon using keyboard hotkey "**s-blank**", then press **Enter** to turn off / on all the display monitors.
s-blank#(Output I**D**) – **Enter** (lower-case)	To toggle off/on a specified display monitor connected to Sequoia 4K60L. For example, pressing "**s-blank2**", then **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.

Changing the Display Configuration Mode (hotkeys) –

Keys	Function
Alt – q – b	To switch display configuration to Workstation (default) mode (Quad-view on the 1st HDMI OUT, single-view fullscreen on 2nd – 3rd HDMI OUT, and duplicated quad-view on the 4th HDMI OUT)
Alt – s – s	To switch display configuration to Workstation (4 Singles) mode (single-view fullscreen on the 1st – 4th HDMI OUT capable of seamless switching).
Alt – v – w	To switch display configuration to Video Wall mode (a 2x2 video wall with each input source display on an individual screen)

Source Image Cropping (hotkeys) –

Keys	Function
Ctrl + c	Toggles on/off the Image Cropping mode in **Host** mode. Upon pressing keyboard hotkey "**Ctrl + c**", the image will become fullscreen and a green frame will be displayed on the screen. You can use the following hotkeys to adjust or reset the cropping area. When the crop area is complete, use the keyboard **Enter** key to apply the cropping effect and return to multiview.
l + →	Adjusts the left border of cropping area by 1 pixel. When **Caps Lock** is **On**, the left border will be adjusted by 50 pixels.
r + ←	Adjusts the right border of cropping area by 1 pixel. When **Caps Lock** is **On**, the right border will be adjusted by 50 pixels.
t + ↓	Adjusts the top border of cropping area by 1 pixel. When **Caps Lock** is **On**, the top border will be adjusted by 50 pixels.
b + ↑	Adjusts the bottom border of cropping area by 1 pixel. When **Caps Lock** is **On**, the bottom border will be adjusted by 50 pixels.
Space	Toggles on/off the cropped image preview function.
s + ↑	Resets the cropping area to default setting. Or click the mouse right button to reset the cropping area. *Note*: The image (window) selected is where the **Host** cursor is currently. The cropped area will be saved in the Sequoia 4K60L and will be recalled upon using keyboard hotkey "**Ctrl + c**".
Ctrl + x	When not in Image Cropping mode, deletes the cropping area and returns to the normal image.

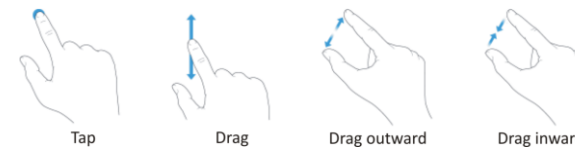Use the following hot keys only in the **Remote** operation mode.

Keys	Function
Pause Break	Exit from the **Remote** operation mode to the **Host** operation mode. *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.*
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** 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) *Note:* 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** of Sequoia 4K60L.*
Ctrl – 1 – q	Resume to quad multiview display layout before fullscreen mode. *Note: This hotkey is only available for the port marked **HDMI OUT** of Sequoia 4K60L.*
Ctrl – # (HDMI OUT ID **2 – 3**) **– #** (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**). *Note: This hotkey is only available for the ports marked **HDMI OUT 2** and **HDMI OUT 3** of Sequoia 4K60L.*
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 to turn off/on all of the display monitors connected to Sequoia 4K60L. Upon using keyboard hotkey "**s-blank**", then press **Enter** to turn off / on all the display monitors.
s-blank#(Output I**D**) – **Enter** (lower-case)	To toggle to turn off/on a specified display monitor connected to Sequoia 4K60L. Upon using keyboard hotkey, i.e. "**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.*

Move/Resize Window
A few simple gestures – tap, drag, and pinch – are all you need to use a touchscreen with the Sequoia 4K60L.

Tap   Drag   Drag outward   Drag inward

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.

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.

Full screen window –
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.

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.
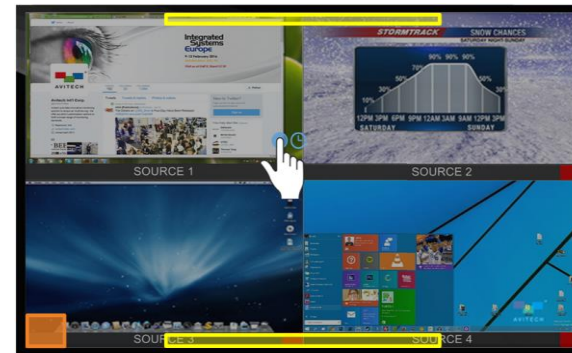
Sequoia 4K60L Front View

Sequoia 4K60L Rear View

PC 1   PC 2   PC 3   PC 4

→ HDMI cable
→ USB A/B cable

1. Connect one end of the USB A/B cable to the USB Type-B port marked **1** on the rear panel of Sequoia 4K60L. Connect the other end to the first computer's USB Type-A port. Connect another USB A/B cables to the USB Type-B ports marked **2** / **3** / **4** on the rear panel of Sequoia 4K60L and the other end 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 4K60L. 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 4K60L 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** on the rear panel of Sequoia 4K60L. Connect the other end to the touchscreen display device's HDMI port.

4. Connect one end of the USB A/B cable to the USB Type-A port marked ⌨ on the rear or front panel of Sequoia 4K60L. Then connect one end of the USB A/B cable to the USB Type-B port to the touchscreen display device.

5. Connect the mouse and keyboard devices to the USB Type-A ports marked ⌨ on the rear or front panel of Sequoia 4K60L.

6. Connect a 12 V DC power adapter to Sequoia 4K60L.

7. Press the power switch to the **ON** position of Sequoia 4K60L. 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 4K60L for the very first time, or upon resetting your Sequoia 4K60L 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 4K60L 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.