Sequoia UHD / UHD+ / UHD/T / UHD/T+
Simplified UHD Multi-viewer Solution for Multiple Computer and Video System

ABOUT THIS MANUAL
This manual contains information on how to use the Avitech Sequoia UHD / UHD+ / UHD/T / UHD/T+ keyboard mouse controller. There are six chapters in this manual.

- ✓ **Getting Started** introduces features and specifications as well as external components of the Avitech Sequoia UHD / UHD+ / UHD/T / UHD/T+.
- ✓ **System Configuration** discusses the process of setting up your Sequoia UHD / UHD+ / UHD/T / UHD/T+.
- ✓ **Basic Operations** introduces the two types of operating modes and demonstrates the keyboard and mouse hot-keys to perform basic operations, as well as using the on-screen pop-up menu to configure your Sequoia UHD / UHD+ / UHD/T / UHD/T+.
- ✓ **Using the Mouse Right-click Menu**, **Changing the Background Image and Salvo** discusses display and feature settings for the Sequoia UHD / UHD+ / UHD/T / UHD/T+ such as customization of the user interface, presets save/load, alarm setup, audio routing, file transfer, and hot-key hint. It also touches on setting the background image of the preview area of the in-system GUI as well as configure salvo to map sources and destinations (routings).
- ✓ **Video Wall Management** provides the steps necessary to setup 1×1 and 2×2 and 2×3 and 3×4 wall display.
- ✓ **Using the Touch-screen** discusses the process of using the touch-screen feature.

The following conventions are used to distinguish elements of text throughout the manual.

provides additional hints or information that require special attention.

identifies warnings which must be strictly followed.

Any name of a menu, command, icon or button displayed on the screen is shown in a bold typeset.
For example: On the **Start** menu select **Settings**.

Any name that refers to a mode is underlined.
For example: Windows can be adjusted by the Host cursor when the Sequoia UHD / UHD+ / UHD/T / UHD/T+ are in Host mode.

To assist us in making improvements to this user manual, we welcome any comments and constructive criticism. Please email us at: sales@avitechvideo.com.

CAUTION
RISK OF EXPLOSION IF BATTERY IS REPLACED
BY AN INCORRECT TYPE.
DISPOSE OF USED BATTERIES ACCORDING
TO THE INSTRUCTIONS.

Do not attempt to disassemble the Sequoia UHD / UHD+ / UHD/T / UHD/T+. Doing so may void the warranty. There are no serviceable parts inside. Please refer all servicing to qualified personnel.

WARNING **Hazardous moving parts** **Keep away from moving fan blades**

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AVITECH INTERNATIONAL CORPORATION
● 15377 NE 90th Street Redmond, WA 98052 USA
● TOLL FREE 1 877 AVITECH
● PHONE 1 425 885 3863
● FAX 1 425 885 4726
● info@avitechvideo.com
● http://avitechvideo.com

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Dit product is in navolging van de bepalingen van Europees Directief 1999/5/EC.

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Statement of Compliance
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1. Getting Started

The Avitech Sequoia UHD is a highly innovative device that comes with its own embedded operating system and graphic engines. The Sequoia UHD integrates functions of a KVM (keyboard video mouse) switch and a robust multi-viewer into one enclosure, providing a simple multi-viewing solution for any user who works in an environment with multiple computer and video systems. With a single Sequoia UHD being able to connect up to four-plus-one computers and instantly switch inputs among them, users can monitor and remotely control any four computers at the same time on a single display plus a fifth computer on a full-screen display with just one set of keyboard and mouse. With the added option of IP-based remote control, this ensures intuitive user experience at the router's destination over an extended distance from source devices, and allowing streamlined access to a bank of computers by a single keyboard/mouse. The Sequoia UHD also supports a variety of video formats from HDMI to DVI-D.

With the SUHD-IP module installed in your Sequoia UHD, intuitive signal switching and routing can be achieved through the in-system GUI. The IP TX/RX list panels provide full configurations for switching/ routing of video signals. User can freely switch a detected TX source to any of the four built-in RX ports in the SUHD-IP module, or route a TX source to any of the detected Avitech RX devices in the same network mask through the IP TX/RX list panels, performing centralized management over all connected devices.

The Sequoia UHD features an on-screen pop-up selection plus mouse right-click menu that allows handy operation and control of the device. By clicking the relevant pop-up selections' icon or pressing the hot-keys through the keyboard, users can easily convert monitoring styles to various layouts, and adjust windows to any size and position on the display. The mouse right-click menu allows users to freely set up or configure numerous features for different applications; including audio source routing.

In addition to its interface and features, the Sequoia UHD can enter <u>Remote</u> mode to transfer keyboard and mouse control from the Sequoia to the connected computer systems. Users can then remotely control any of the connected computers with the set of keyboard and mouse on the Sequoia. The "Surfer" feature, along with other user-friendly commands supported by the Sequoia UHD allows users to freely switch control between the computers and the host Sequoia in an intuitive manner.

This chapter will continue to introduce more features and specifications as well as external components of your Sequoia UHD / UHD+ / UHD/T / UHD/T+.

> *The information appearing in this manual applies to Sequoia UHD / UHD+ / UHD/T / UHD/T+, as well as the IP receiver modules (Sequoia UHD-IPc / UHD-IPf), UHD to HD converter module (Sequoia UHD2HD) and the KM card (Sequoia UHD-KM)), which can be ordered to create highly customized systems. All of the Sequoia series add-on cards are compatible with either of the Sequoia UHD models.*

> *To get the best results from Sequoia UHD, we recommend the following:*
> ✓ *When using your mouse with a 4K display, select a mouse that has a 2000 dpi setting.*
> ✓ *In industrial environments, use shielded Ethernet cables (shielded Ethernet cables are often marked F/UTP or FTP).*

1.1 Package Contents

The following standard items are included in the shipping package:

Avitech Sequoia UHD / **UHD+** / **UHD/T** / **UHD/T+**

Utility Disc (user manual)

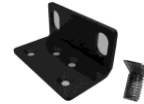**12 V DC Power Adapter** (optional)

Standard Power Cord (USA customer only)

HDMI to DVI Adapter (optional)

Ear with Screw
(installed on Sequoia UHD upon order for assembly on to rack mount)

USB A/B Cable (length 1.8 m – optional)

HDMI® Cable (length 1.8 m – optional)

Male to Dual Male Y Splitter Audio Cable
(length 1.8 m – optional)

Table 1-1 Package Contents

1.2 Product Features

Model	KM Module	IP Module	UHD2HD Converter Module	Cascadable	REF I/O	IP Transmitter
Sequoia UHD	Optional	Optional	Optional	N/A	N/A	N/A
Sequoia UHD+	Optional	Optional	Optional	√	BNC (2)	N/A
Sequoia UHD/T	Optional	Optional	Optional	N/A	N/A	CAT-5e/6 / SFP
Sequoia UHD/T+	Optional	Optional	Optional	√	BNC (2)	CAT-5e/6 / SFP

Table 1-2 Sequoia UHD Series Comparison

The Sequoia UHD is HDCP-compliant and capable of handling HDMI® and DVI-D inputs. Featuring four HDMI input ports, and one HDMI output port, a single Sequoia UHD can connect up to four-plus-one computers, four videos, or any combination of four inputs. It can simultaneously display four inputs on a single display, and allows instant switching of inputs through its OSD.

The Sequoia UHD features automatic sensing of input signals, automatic detection and selection of optimum display resolution; it also supports hot-swapping which allows addition and removal of any input/output signals without powering down the device. Genlock capability supports synchronizing multiviewer outputs to the reference signal and the rest of studio/production equipment.

For audio monitoring of the four remote computers, the Sequoia UHD features four 1/8 inch headphone jack via the proprietary Sequoia male to dual male Y splitter audio cable. It also allows monitoring of the fifth computer on another 1/8 inch headphone jack via the proprietary Sequoia male to dual male Y splitter audio cable. It accepts embedded HDMI® audio (8ch-stereo). Instant switching of audio signal source for audio routing including "mix" and "mute" is available through the right-click menu.

For operation, Sequoia UHD provides convenient on-screen pop-up selections and right-click menu as well as easy to recall hot-keys that can be controlled by a set of keyboard and mouse, allowing free switching of operating modes and adjustments for numerous behavior that suits different applications.

In addition to monitoring, the Sequoia UHD can remotely control the connected computers through the USB keyboard and mouse connected to its rear panel. Utilizing the "Surfer" feature – which allows users to transfer keyboard and mouse control from one computer to another by simply moving the mouse cursor to the window border of the targeted computer, the Sequoia UHD is able to seamlessly switch between and control any of the four-plus-one computers connected to it with just one set of keyboard and mouse. Up to two IP cards (SUHD-IP) used in conjunction with Avitech's Pacific extenders allows sources to be installed out-of-sight at central, air-conditioned equipment rack and accessed remotely.

> *What is a window?*
> *A window is a container for an input source. You can have multiple windows playing the same source. You can resize and move windows in the user interface.*

The Sequoia UHD is also extremely scalable; users can easily expand the system by cascading up to 25 chassis which allows for the monitoring of up to 100 signal sources on multiple screens.

> *The maximum number of Sequoia UHD chassis that can be cascaded may be limited only by the minimum Image size that user deems acceptable in the monitor display.*

Integrated file and folder transfer across computers provides convenient file management. By selecting an origin and a destination through the onscreen user interface, the Sequoia UHD allows simple copy/ cut and paste of files/folders across connected computers using its embedded file managing tool (Go! Bridge Utility).

The Sequoia's front panel features LED indicator for monitoring Power.

The temperature monitor with automatic PWM fan speed controls to protect against system failure. The low noise and speed-varying fan along with the stand-alone and rack mountable module designs make the Sequoia UHD suitable for various work environments.

1. Non-standard keyboards (i.e. keyboards with a USB hub, keyboards that need driver installation and programmable keyboards, etc.) are not supported.
2. Compatibility between the computer and the Sequoia UHD may depend on the computer's BIOS Setup. If an incompatibility occurs, refer to the computer's BIOS Setup and make sure USB port is enabled if this item exists in the computer's BIOS Setup (typically found in the "Advanced" or "Onboard Device Configuration" menu).

1.3 Specifications

Supported HDMI / DVI-D Input Format	Supported HDMI Output Format					
	4096×2160p 25Hz	4096×2160p 30Hz	3840×2160p 25Hz	3840×2160p 30Hz	1920×1080p 50Hz	1920×1080p 60Hz
3840×2160p 30Hz	√	√	√	√	√	√
3840×2160p 29.97Hz	√	√	√	√	√	√
3840×2160p 25Hz	√	√	√	√	√	√
3840×2160p 24Hz	√	√	√	√	√	√
2048×2048p 56.57Hz	√	√	√	√	√	√
1920×1200 60Hz (Reduced Blanking)	√	√	√	√	√	√
1920×1200 50Hz (Reduced Blanking)	√	√	√	√	√	√
1920×1080p 60Hz	√	√	√	√	√	√
1920×1080p 59.94Hz	√	√	√	√	√	√
1920×1080p 50Hz	√	√	√	√	√	√
1920×1080p 30Hz	√	√	√	√	√	√
1920×1080p 29.97Hz	√	√	√	√	√	√
1920×1080p 25Hz	√	√	√	√	√	√
1920×1080p 24Hz	√	√	√	√	√	√
1920×1080p 23.97Hz	√	√	√	√	√	√
1920×1080i 60Hz	√	√	√	√	√	√
1920×1080i 59.94Hz	√	√	√	√	√	√
1920×1080i 50Hz	√	√	√	√	√	√
1680×1050 60Hz	√	√	√	√	√	√
1680×1050 50Hz	√	√	√	√	√	√
1600×1200 60Hz	√	√	√	√	√	√
1600×1200 50Hz	√	√	√	√	√	√
1440×900 60Hz	√	√	√	√	√	√
1440×900 50Hz	√	√	√	√	√	√
1400×1050 60Hz	√	√	√	√	√	√
1400×1050 50Hz	√	√	√	√	√	√
1366×768 60Hz	√	√	√	√	√	√
1366×768 50Hz	√	√	√	√	√	√
1360×768 60Hz	√	√	√	√	√	√
1360×768 50Hz	√	√	√	√	√	√
1280×1024 75Hz	√	√	√	√	√	√
1280×1024 60Hz	√	√	√	√	√	√
1280×1024 50Hz	√	√	√	√	√	√
1280×960 60Hz	√	√	√	√	√	√
1280×960 50Hz	√	√	√	√	√	√
1280×720p 60Hz	√	√	√	√	√	√
1280×720p 59.94Hz	√	√	√	√	√	√

Supported HDMI / DVI-D Input Format	Supported HDMI Output Format					
	4096×2160p 25Hz	4096×2160p 30Hz	3840×2160p 25Hz	3840×2160p 30Hz	1920×1080p 50Hz	1920×1080p 60Hz
1280×720p 50Hz	√	√	√	√	√	√
1024×768 75Hz	√	√	√	√	√	√
1024×768 60Hz	√	√	√	√	√	√
1024×768 50Hz	√	√	√	√	√	√
800×600 75Hz	√	√	√	√	√	√
800×600 60Hz	√	√	√	√	√	√
800×600 50Hz	√	√	√	√	√	√
720×576p 50Hz	√	√	√	√	√	√
720×576i 50Hz	√	√	√	√	√	√
720×480i 60Hz	√	√	√	√	√	√
720×480i 59.94Hz	√	√	√	√	√	√
720×480p 60Hz	√	√	√	√	√	√
720×480p 59.94Hz	√	√	√	√	√	√
640×480p 60Hz	√	√	√	√	√	√

Table 1-2 Supported HDMI Output Format

Others	
Peripheral / File Sharing	Method: ❖ *USB type A port (for USB 2.0 hub)* ❖ *GO! Bridge Utility software*
Computer Connection	Up to 5 units (maximum for single Sequoia UHD system) Up to 25 units (maximum for cascaded Sequoia UHD systems)

Port Switching	Method:
	❖ *Keyboard hot-keys (both in Host and Remote operation modes)*
	❖ *Mouse*
	   OSD (pop-up menu – in Host operation mode)
	   Surfer feature (both in Host and Remote operation modes)

Operating System	Microsoft Windows 2000 Professional / XP / Vista / Server 2003 / Server 2008 / Windows 7 / Windows 8 / Windows 10 Mac (O/S X 10.5 or later version only) 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, Raspbian Android 4.4.2 / 6.0.1 *Note: Windows NT is not supported*
Power	Power consumption is 54 W (maximum) Power Supply (*adapter*): ❖ *Input (AC): 100 to 240 V 50Hz / 60Hz* *(DC): 12 V DC / 9 A*
Dimensions/Weight	Dimensions: 39.40×43.90×4.44 cm (15.51×17.28×1.75 inch) Weight: 4.43 kg (9.77 lb)
Environment/Safety	Temperature: ❖ *Operating: 0 ℃ (32 ℉) to 40 ℃ (104 ℉)* ❖ *Storage: –10 ℃ (14 ℉) to 50 ℃ (122 ℉)* Humidity: 0 % to 80 % relative, non-condensing Safety: FCC / CE / C-Tick / Class A

Table 1-3 Specifications

📄
1. *The Sequoia UHD supports DVI-D input(s) through the optional HDMI to DVI adapter.*
2. *The Sequoia UHD's HDMI input/output ports support HDMI revision 1.4 and HDCP revision 1.4.*
3. *For best results with HDMI/DVI, use cables under 15 m long, or shorter if you use connection adapters. If you need to place your Sequoia UHD more than 15 m away from your sources, use a signal extender.*
4. *Use High Speed or Premium High Speed HDMI cables.*
5. *The 59.94Hz refresh rate is only supported during transmission of a genlock source to the REF IN port.*
6. *To prevent temporary image discoloration when switching 4K input sources in full screen mode, make sure that the "Output color mode (color space)" setting of all four computer's 4K display card connected to the Sequoia UHD has the same "RGB" or "YCbCr422" or "YCbCr444" setting.*
7. *For monitors whose display mode can be set between "Graphic" and "Video", select "Graphic";*
   for those whose display color format can be set between "RGB" and "YPbPr", select "RGB";
   for those whose display mode can be set between "PC" and "AV", select "PC"
   (selecting the other ones may lead to corrupted displays).
   Other display modes not mentioned here can be tried when encountering display problems.
8. *It is suggested to always reboot the Sequoia UHD after switching to a different monitor (especially one that supports a different optimal resolution); this will ensure the Sequoia UHD to select the correct output resolution and frame rate.*

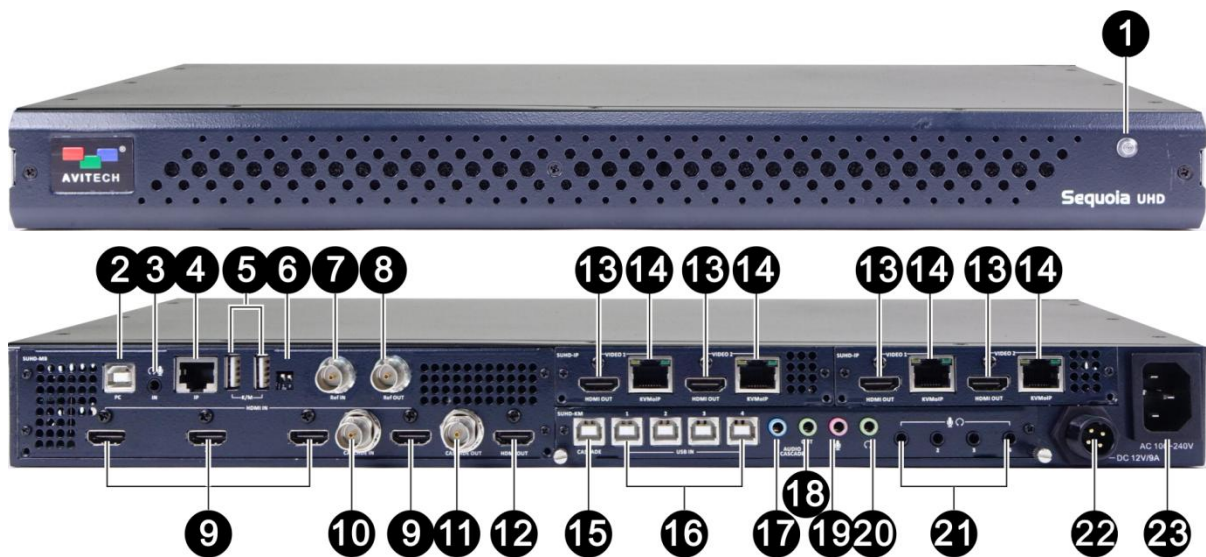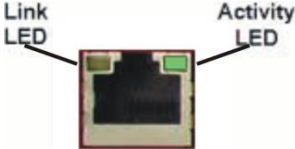## 1.4 Connections to the Sequoia UHD / UHD+ / UHD/T / UHD/T+

Figure 1-1 Sequoia UHD / UHD+ Components

Front Panel	
❶ **Indicator**	Glows green when the Sequoia UHD / UHD+ is connected to power.

SUHD-MB	
❷ **PC**	USB port connection to a fifth (local) computer and passes the keyboard/mouse control from it.
❸ 🎧🎤 **IN**	Connects to a fifth (local) computer's audio connectors via the proprietary Sequoia male to dual male Y splitter audio cable. Since this audio port is bi-directional, depending on your setting in the right-click menu item "Audio routing" (see chapter 4 for details), connect a set of headphone or stereo speakers for audio output; or connect a microphone for audio input.
❹ **IP**	Ethernet connector for HTTP commands or third-party control as well as for connecting to a gigabit IGMP switch for detecting TX (transmitters) and RX (receivers) for use together with the SUHD-IP.
❺ **K/M**	USB keyboard/mouse for KVM and in-system GUI operation.
❻ **Dip Switches**	Resets the Sequoia UHD to factory-default settings.
❼ **REF IN**	<u>Future option – For Sequoia UHD+ only</u> For genlock signal input that supports: Black Burst, Tri-level and Sequoia UHD+ proprietary.

SUHD-MB	
❽ REF OUT	Future option – For Sequoia UHD+ only For genlock signal output that supports Sequoia UHD+ proprietary.
❾ HDMI IN 1 ~ 4	Four HDMI type A connectors for HDMI / DVI-D input sources (DVI to HDMI adapters may be needed). *Note: Transmission of audio signal is not included when using the DVI to HDMI adapter.*
❿ CASCADE IN	For Sequoia UHD+ only BNC connector for externally cascaded SDI input signal from an upstream Sequoia UHD+ / UHD/T+ (**CASCADE OUT**).
⓫ CASCADE OUT	For Sequoia UHD+ only BNC connector for externally cascaded SDI output signal to a downstream Sequoia UHD+ / UHD/T+ (**CASCADE IN**).
⓬ HDMI OUT	HDMI type A connector for HDMI/DVI monitor (HDMI to DVI adapters may be needed). *Note: Transmission of audio signal is not included when using the DVI to HDMI adapter.*

SUHD-IP	
⓭ HDMI OUT (**VIDEO 1/2**)	HDMI type A connector for pass-through output from the RJ-45 input source
⓮ KVMoIP (**VIDEO 1/2**)	RJ-45 connectors for connecting Avitech's Pacific X-IPT via CAT-5e/6 Ethernet cables. ✓ Transmission of HDMI/DVI (with adapter) video, embedded audio and USB keyboard/mouse control signals ✓ "Link" LED indicator glows yellow when connection with Avitech's Pacific X-IPT is established "Activity" LED indicator blinks green when data (signal) is transmitted

SUHD-KM	
⓯ CASCADE	USB type B port for externally cascaded keyboard/mouse control signal.
⓰ USB IN 1 ~ 4	Four USB type B ports for connecting the respective computers' USB type A ports via standard USB A/B cables; and transmission of keyboard/mouse control signals to source computers.
⓱ AUDIO CASCADE IN	Audio connector for externally cascaded audio input signal from an upstream SUHD-KM (**AUDIO CASCADE OUT**).
⓲ AUDIO CASCADE OUT	Audio connector for externally cascaded audio output signal to a downstream SUHD-KM (**AUDIO CASCADE IN**).
⓳ 🎤	Connects to the red connector for microphone function.
⓴ 🎧	Connects to the green connector for headphone function or set of speakers (stereo).
㉑ 🎤🎧 1 / 2 / 3 / 4	Connects to the respective remote computer's (1~4) audio connectors (through the Sequoia male to dual male Y splitter audio cable). Since these audio ports are bi-directional, depending on your setting in the right-click menu item "Audio routing" (see chapter 4 for details), connect a set of headphone or stereo speakers for audio output; or connect a microphone for audio input.

Rear Panel	
㉒ Power (DC 12 V / 9 A)	Connects to the 12 V DC / 9 A power adapter for redundant power.
㉓ Power In	AC 100~240 V 50/60Hz

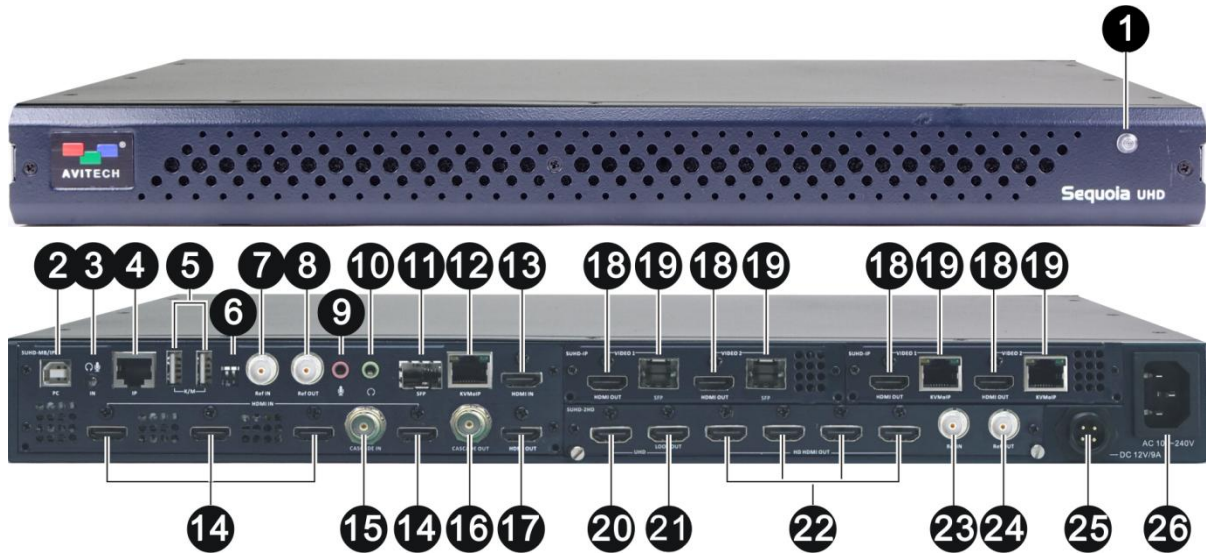**Table 1-4** Sequoia UHD / UHD+ Component Description

Figure 1-2 Sequoia UHD/T / UHD/T+ Components

Front Panel	
❶ **Indicator**	Glows green when the Sequoia UHD/T / UHD/T+ is connected to power.

| SUHD-MB/IP	
❷ **PC**	USB port connection to a fifth (local) computer and passes the keyboard/mouse control from it.
❸ 🎧🎤 **IN**	Connects to a fifth (local) computer's audio connectors via the proprietary Sequoia male to dual male Y splitter audio cable. Since this audio port is bi-directional, depending on your setting in the right-click menu item "Audio routing" (see chapter 4 for details), connect a set of headphone or stereo speakers for audio output; or connect a microphone for audio input.
❹ **IP**	Ethernet connector for HTTP commands or third-party control as well as for connecting to a gigabit IGMP switch for detecting TX (transmitters) and RX (receivers) for use together with the SUHD-IP module.
❺ **K/M**	USB keyboard/mouse for KVM and in-system GUI operation.
❻ **Dip Switches**	Resets the Sequoia UHD to factory-default settings.
❼ **REF IN**	For genlock signal input that supports: Black Burst, Tri-level and Sequoia UHD/T+ proprietary.
❽ **REF OUT**	For genlock signal output that supports Sequoia UHD/T+ proprietary.
❾ 🎤	Connects to the red connector for microphone function.
❿ 🎧	Connects to the green connector for headphone function or set of speakers (stereo).
⓫ **SFP** (slot)	Accepts one gigabit SFP (small form-factor pluggable) single-mode transceiver module.

SUHD-MB/IP	
⓬ KVMoIP (RJ45)	RJ-45 connector for connecting with Avitech's Pacific X-IPTR / X-IPTRS / X-IPr (receiver) via CAT-5e/6 Ethernet cables. ✓ Transmission of HDMI/DVI (with adapter) video, embedded audio, USB keyboard/mouse control, UART, RS-232 and infrared signals ✓ "Link" LED indicator glows orange when connection with another Avitech's Pacific X-IPTR / X-IPTRS / X-IPr (receiver) is established "Activity" LED indicator blinks green on data (signal) transmission Link LED Activity LED
⓭ HDMI IN	Accepts HDMI input source from the **HDMI OUT** port below it so that image signal is also included when transmitting through the **KVMoIP** port (previous port).
⓮ HDMI IN 1 ~ 4	Four HDMI type A connectors for HDMI / DVI-D input sources (DVI to HDMI adapters may be needed). *Note: Transmission of audio signal is not included when using the DVI to HDMI adapter.*
⓯ CASCADE IN	<u>For Sequoia UHD/T+ only</u> BNC connector for externally cascaded SDI input signal from an upstream Sequoia UHD+ / UHD/T+ (**CASCADE OUT**).
⓰ CASCADE OUT	<u>For Sequoia UHD/T+ only</u> BNC connector for externally cascaded SDI output signal to a downstream Sequoia UHD+ / UHD/T+ (**CASCADE IN**).
⓱ HDMI OUT	HDMI type A connector for routing video signal to the **HDMI IN** port above it. Or, for connecting to a HDMI/DVI monitor (HDMI to DVI adapters may be needed). *Note: Transmission of audio signal is not included when using the DVI to HDMI adapter to connect to monitor.*
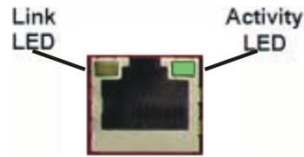
SUHD-IP	
⓲ HDMI OUT (**VIDEO 1**/**2**)	HDMI type A connector for pass-through output from the SFP / RJ-45 input source
⓳ SFP (slot) (**VIDEO 1**/**2**) Or	Accepts one gigabit SFP (small form-factor pluggable) single-mode transceiver module.
⓳ KVMoIP (RJ-45) (**VIDEO 1**/**2**)	RJ-45 connector for connecting with Avitech's Pacific X-IPT / X-IPTR / X-IPTRS / X-IPt (transmitter) via CAT-5e/6 Ethernet cables. ✓ Transmission of HDMI/DVI (with adapter) video, embedded audio and USB keyboard/mouse control signals ✓ "Link" LED indicator glows yellow when connection with Avitech's Pacific X-IPT / X-IPTR / X-IPTRS / X-IPt (transmitter) is established "Activity" LED indicator blinks green on data (signal) transmission Link LED Activity LED
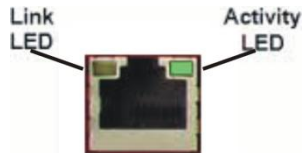
SUHD-2HD	
❷⓿ **IN** (**UHD**)	Accepts HDMI 4K30 video/audio input.
❷❶ **LOOP OUT** (**UHD**)	Connects to HDMI or DVI (via DVI to HDMI adapter) 4K30 monitor. Audio out is available when connecting to HDMI monitor.
❷❷ **HD HDMI OUT 1 ~ 4**	Four HD (1080p) HDMI type A connector of decoded output to video wall (2×2) from the **IN** (**UHD**) input source (4K30).
❷❸ **REF IN**	<u>Future option</u> For genlock signal input that supports: Black Burst, Tri-level and Sequoia UHD/T+ proprietary.
❷❹ **REF OUT**	<u>Future option</u> For genlock signal output that supports Sequoia UHD/T+ proprietary.

Rear Panel	
❷❺ **Power** (DC 12 V / 9 A)	Connects to the 12 V DC / 9 A power adapter for redundant power.
❷❻ **Power In**	AC 100~240 V 50/60Hz

Table 1-5 Sequoia UHD/T / UHD/T+ Component Description

2. System Configuration

This chapter provides information on installing and removing a modular card into and out of the Sequoia UHD chassis. It also discusses the process of setting up your Sequoia UHD.

2.1 Installing a New Module on a Blank Slot

The Sequoia UHD chassis accepts the following modules:

- ✓ SUHD-MB Module (may be pre-installed from the dealer)
- ✓ SUHD-MB/IPT Module (may be pre-installed from the dealer)
- ✓ SUHD-IPc Module
- ✓ SUHD-IPf Module
- ✓ SUHD-2HD Module

Keyboard/Mouse Module:

- ✓ SUHD-KM Module

> 📄 *1. Because the Sequoia UHD is available as a customizable system, the illustrations in this chapter and those used throughout the manual may differ from the model(s) you purchased.*
> *2. Keep a note of which transmitter/receiver is connected to which port. You can use this information later when you rename transmitters/receivers in the **IP TX List** and **IP RX List** tables.*
> *3. You do not have to use all the slots.*

Installation and removal of the modules follow the same procedures. In this section, a SUHD-IP module was used as an example.

To install a SUHD-IP module on a blank slot, perform the following steps:

Step 1. Remove the two screws securing the back plate.

Figure 2-1 Remove the Two Plate Screws

Step 2. Remove the back plate.

Figure 2-2 Remove the Back Plate

Step 3. Align both sides of the SUHD-IP module to the rails of the slot, and then slide it all the way into the chassis.
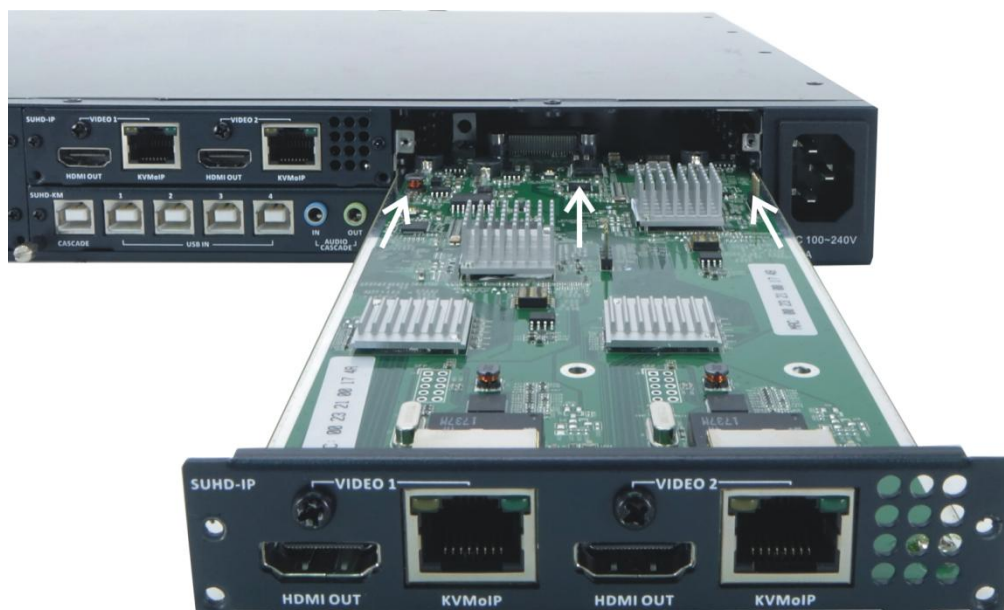

Figure 2-3 Align the New Module to the Rail on Both Sides

Step 4. Tighten the screws on both sides to secure the newly installed module to the chassis.

Figure 2-4 Tighten the Module Screws on Both Sides

2.2 Removing a Previously Installed Module

To remove or replace an installed module, perform the following steps:

Step 1. Use a slot head screwdriver to unscrew both puller screws from the right-most module (installed from the dealer).

Figure 2-5 Remove Puller Screws from the Module

Step 2. Use the just-removed puller screws and screw them to both sides of the module to be removed.

Step 3. Remove the two screws securing the module to the chassis.
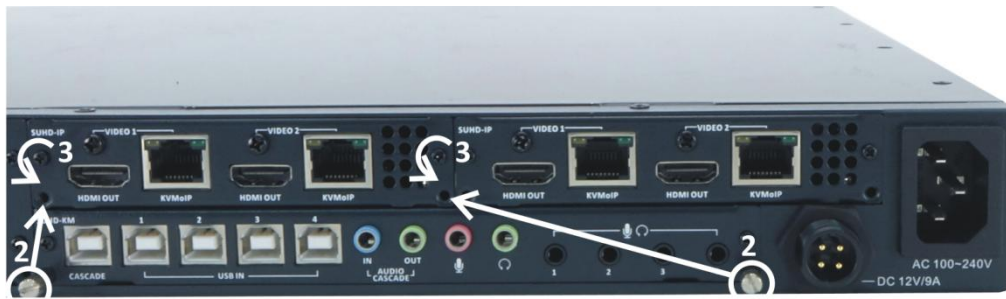
Figure 2-6 Remove the Two Module Screws

Step 4. Grasp both left and right puller screws and pull the module away from the chassis.

Step 5. Install another module (or a back plate cover) to the chassis and tighten both screws.

2.3 Getting the Sequoia UHD Ready

To control your Sequoia UHD directly, connect a keyboard and mouse to the USB type A ports ⬛ on its rear panel.

> 📄 *In order to ensure the optimum mouse control speed when using your Sequoia UHD, the following are strongly recommended:*
> 1. *The computer's output resolution for 1080p should be set at 30Hz as well as for 4K at 30Hz.*
> 2. *The default **Mouse setup** (pointer speed) found in the right-click menu item **System** is **3**. Try changing the value if so desired. See chapter 4 for details.*
> 3. *Lastly, try adjusting the value of your Windows operating system > **Control Panel** > **Mouse** > **Pointer Options** > **Motion** (**Select a pointer speed**).*

2.3.1 Basic Setup

The following figure show a typical setup with a single Sequoia UHD dual UHD monitor operation for five systems with one set of keyboard and mouse.

> 📄 *<u>DO NOT</u> place any object on the front and side panels of the Sequoia UHD. Doing so may impair its internal components and/or its heat dissipation.*
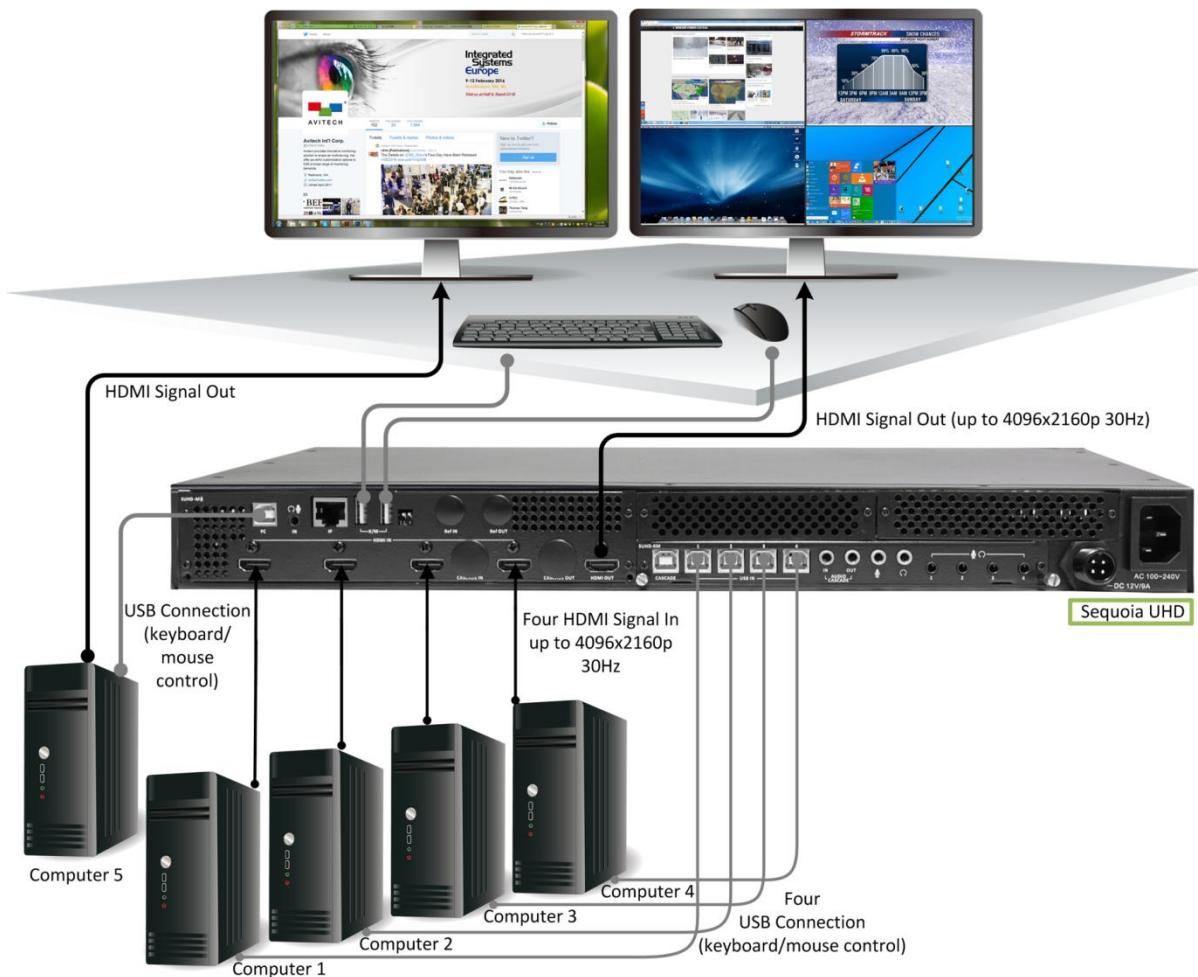
Figure 2-7 Sequoia UHD With Dual UHD Monitor Operation for Five Systems
With One Set of Keyboard and Mouse Setup

*Step 1. Connect the first computer's display output to the HDMI input port (**HDMI IN 1**) of the Sequoia UHD. Repeat the step for all source computers (**HDMI IN 2 ~ 4**).*

📄 *Be sure to connect the first computer to **HDMI IN 1**, the second computer to **HDMI IN 2**, and so forth.*

Step 2. To simultaneously view four concurrent HDMI 1.4 computer sources on a single monitor (up to 4K30), connect a HDMI monitor to the HDMI (**HDMI OUT**) port of the Sequoia UHD.

Step 3. Connect a USB A/B cable to the first computer's USB type A port, and connect the other end to the USB type B port (**USB IN 1**) of the Sequoia UHD. Repeat this step for all source computers (**USB IN 2 ~ 4**).

📄 *1. Be sure to connect the first computer to **USB IN 1**, the second computer to **USB IN 2**, and so forth.*
2. (<u>For Windows 2000 users</u>) Upon connecting your Sequoia UHD to a computer through the USB interface for the first time, perform the Windows' on-screen steps to initialize the USB connection.

Step 4. Connect a set of keyboard and mouse to the **K/M** USB type A ports of the Sequoia UHD that will be used to operate the Sequoia UHD and the four source computers.

📄 *Non-standard keyboards (i.e. keyboards with a USB hub, keyboards that need driver installation and programmable keyboards, etc.) are not supported.*

Step 5. Connect a USB A/B cable to the fifth computer's USB type A port, and connect the other end to the USB type B port (**PC**) of the Sequoia UHD. The Sequoia UHD supports a fifth set of KM (keyboard/mouse) switching on a second monitor next to the multiview display in dual monitor operation setup.

Step 6. Make sure to power-on the four concurrent computers as well as the fifth computer.

Step 7. Connect one end of the AC power cord to the 100~240 V power in jack on the Sequoia UHD.

Step 8. Connect the other end of the AC power cord to power outlet. After the initial 30 seconds or more booting time has elapsed, the four windows (each containing image from one of the connected computers) will appear, along with the <u>Host</u> cursor that can be controlled directly through the mouse connected to your Sequoia UHD's **K/M** USB type A ports.

Step 9. (Optional – to achieve power redundancy)
Connect one end of the optional 12 V DC power adapter to the DC 12 V / 9 A power in jack on the Sequoia UHD.

Step 10. Connect the other end of the optional 12 V DC power adapter to power outlet. Power (AC or DC) can then be unplugged without affecting the power supply to the Sequoia UHD.

Step 11. The pop-up selections [icons] will appear upon moving the <u>Host</u> cursor to each of the four window's top-right position:

✓ Click the **Enter remote mode** [icon] icon on a selected window to enter the Sequoia UHD's <u>Remote</u> mode.
✓ <u>Remote</u> mode allows direct connection to the selected computer through USB interface.
✓ Your Sequoia UHD's (<u>Host</u>) keyboard and mouse will now control the selected computer; the <u>Host</u> cursor will disappear when your Sequoia UHD is in <u>Remote</u> mode.
✓ The "Surfer" feature (default setting is ON) is enabled. Moving your cursor out of your current window's border toward the other window, or pressing **Ctrl** key and moving mouse to the window edges that are shared with the other computer's window will automatically switch over your Sequoia UHD's (<u>Host</u>) keyboard and mouse control to that computer.
✓ Press the **Pause/Break** hot-key on the keyboard or double-click the mouse scroll button connected to your Sequoia UHD's rear panel to return keyboard and mouse control to the Sequoia UHD. The <u>Host</u> cursor will reappear.
✓ Move the <u>Host</u> cursor across two displays to access computers confined to each Sequoia UHD.

📄 | *The pop-up selections* 🔇 🎧 🔄 ⬛ ⬜ *are not available on the fifth computer's monitor.*

2.3.2 Sequoia UHD/T with Pacific X-IPT / X-IPTR (RX) / X-IPRW / X-IPRG Connected via Gigabit IGMP Switch

The following figure show a setup of a single Sequoia UHD connected to a Pacific X-IPT source as well as to a Pacific X-IPTR with Pacific X-IPRW (workstation setup), Pacific X-IPTR (solo) and Pacific X-IPRG via gigabit IGMP switch.

📄 | *DO NOT place any object on the front and side panels of the Sequoia UHD. Doing so may impair its internal components and/or its heat dissipation.*
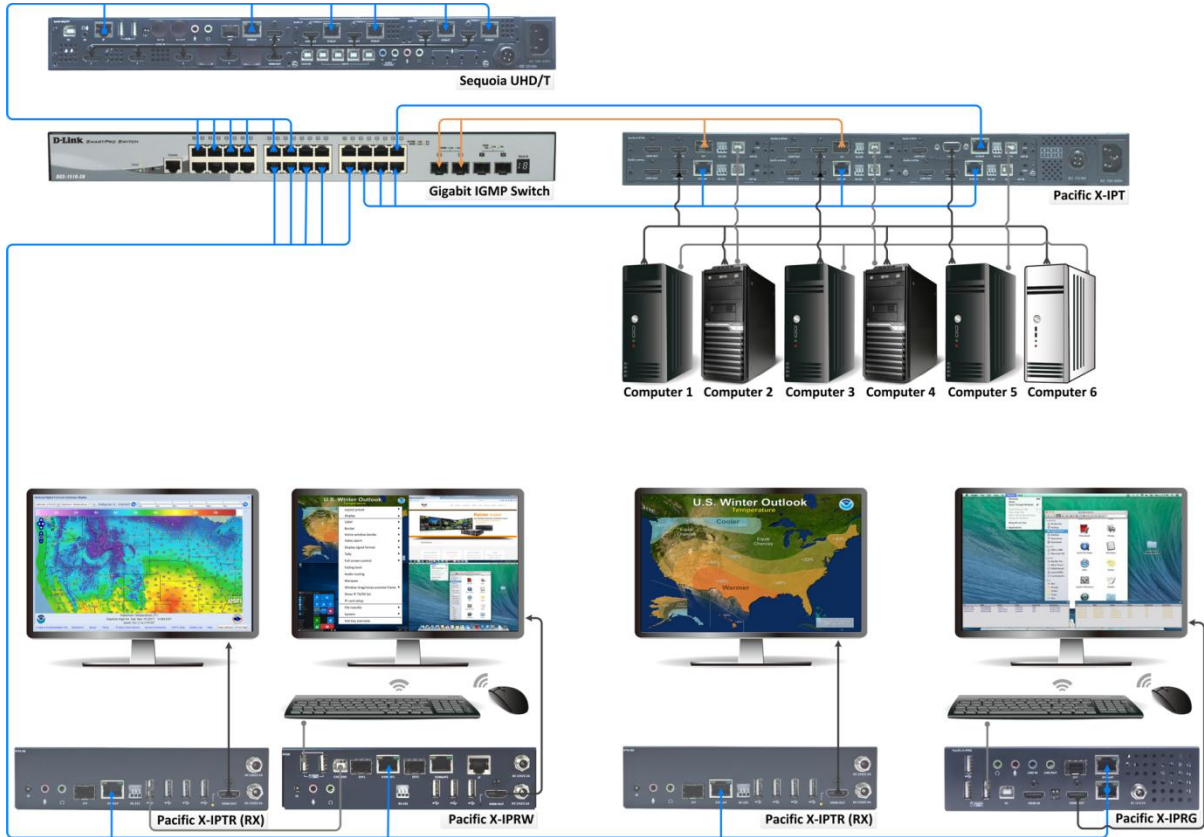
Figure 2-8 Sequoia UHD/T With Pacific X-IPT / Two X-IPTR (RX) / X-IPRW / X-IPRG
via Gigabit IGMP Switch Setup

Connections to the Pacific X-IPT
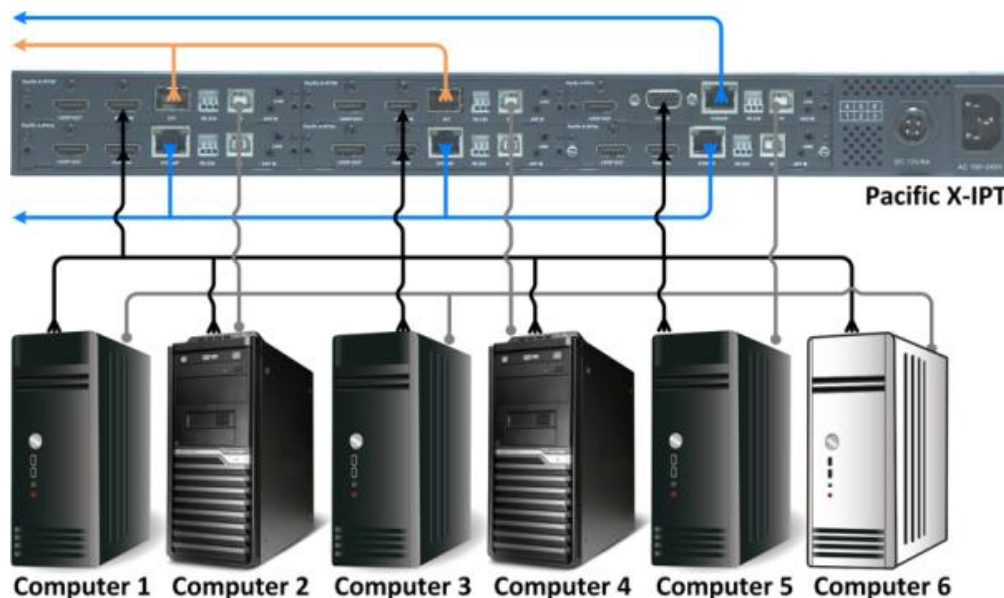
Figure 2-9 Connections to the Pacific X-IPT Diagram

Step 1. *Connect the video sources from remote computer 1~6 to the **HDMI IN / VGA IN** of Pacific X-IPTHc (ID:1~3) / X-IPTHf (ID:4~5) / X-IPTVc (ID:6) using the appropriate signal cable.*

📄 | *Be sure to connect the first computer to **HDMI IN** (ID:1), the second computer to **HDMI IN** (ID:2), and so forth.*

Step 2. *Connect USB A/B cables to the remote computer 1~6's USB type A port, and connect the other end to the USB type B port (**PC**) of Pacific X-IPTHc (ID:1~3) / X-IPTHf (ID:4~5) / X-IPTVc (ID:6).*

📄 | *1. Be sure to connect the first computer to **PC** (ID:1), the second computer to **PC** (ID:2), and so forth.*
2. (For Windows 2000 users) Upon connecting your Pacific X-IPT to a computer through the USB interface for the first time, perform the Windows' on-screen steps to initialize the USB connection.

Step 3. *Connect standard CAT-5e/6 Ethernet cables to the **KVMoIP** (Ethernet) port of Pacific X-IPTHc (ID:1~3), but leave the other end unconnected for now.*

Step 4. *Connect gigabit fiber cables to the **SFP** port of Pacific X-IPTHf (ID:4~5), but leave the other end unconnected for now.*

Step 5. *Connect a standard CAT-5e/6 Ethernet cable to the **KVMoIP** (Ethernet) port of Pacific X-IPTVc (ID:6), but leave the other end unconnected for now.*

Connections to the Sequoia UHD/T

Figure 2-10 Connections to the Sequoia UHD/T Diagram

Step 1. *Connect the video source from the left **SUHD-IP VIDEO 1 HDMI OUT** to the **SUHD-MB/IPT HDMI IN 1** using the appropriate signal cable.*

Step 2. Connect the video source from the left **SUHD-IP VIDEO 2 HDMI OUT** to the **SUHD-MB/IPT HDMI IN 2** using the appropriate signal cable.

Step 3. Connect the video source from the right **SUHD-IP VIDEO 1 HDMI OUT** to the **SUHD-MB/IPT HDMI IN 3** using the appropriate signal cable.

Step 4. Connect the video source from the right **SUHD-IP VIDEO 2 HDMI OUT** to the **SUHD-MB/IPT HDMI IN 4** using the appropriate signal cable.

Step 5. Connect an HDMI cable from the **HDMI IN** to the **HDMI OUT** of **SUHD-MB/IPT**.

Step 6. Connect a standard CAT-5e/6 Ethernet cable to the **SUHD-MB/IPT IP** (Ethernet) port, but leave the other end unconnected for now.

Step 7. Connect a standard CAT-5e/6 Ethernet cable to the **SUHD-MB/IPT KVMoIP** (Ethernet) port, but leave the other end unconnected for now.

Step 8. Connect standard CAT-5e/6 Ethernet cables to the four left and right **SUHD-IP VIDEO 1/2 KVMoIP** (Ethernet) ports, but leave the other ends unconnected for now.

Connections to the Pacific X-IPTR (RX) and Pacific X-IPRW Workstation
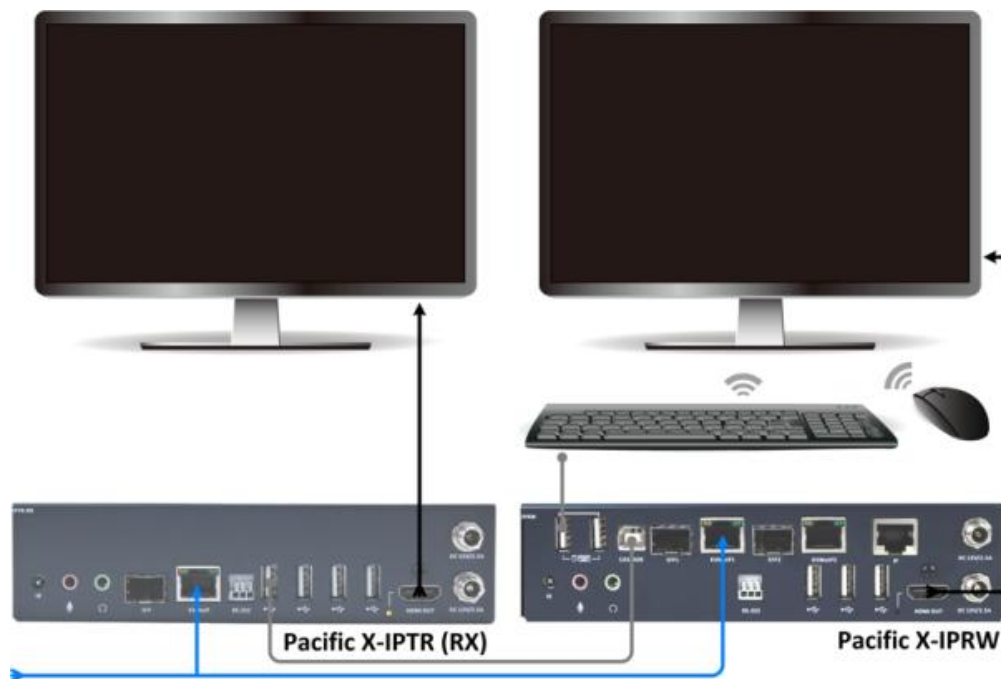
Figure 2-11 Connections to the Pacific X-IPTR (RX) and Pacific X-IPRW Workstation Diagram

Step 1. Make certain the Pacific X-IPTR has dip switch set at Off:On:Off (function as receiver).

📄 *"On" represents dip switch in the "down" while "Off" represents the dip switch in the "up" position.*

Step 2. Connect USB A/B cable to the Pacific X-IPTR **KVMoIP** port, and connect the other end to the USB type B port (**CASCADE**) of Pacific X-IPRW.

Step 3. Connect the Pacific X-IPTR's **HDMI OUT** to monitor using the appropriate signal cable.

Step 4. Connect the Pacific X-IPRW's **HDMI OUT** to monitor using the appropriate signal cable.

Step 5. Connect a set of keyboard and mouse to the ⌨ USB type A ports of the Pacific X-IPRW that can be used for Sequoia UHD's right-click menu.

📄 | *When using your mouse with a 4K display, select a mouse that has a 2000 dpi setting.*

Step 6. Connect a standard CAT-5e/6 Ethernet cable to the **KVMoIP** *(Ethernet) port of Pacific X-IPTR,* *but leave the other end unconnected* *for now.*

Step 7. Connect a standard CAT-5e/6 Ethernet cable to the **KVMoIP1** *(Ethernet) port of Pacific* *X-IPRW,* *but leave the other end unconnected* *for now.*

Connections to the Pacific X-IPTR (RX)

Figure 2-12 Connections to the Pacific X-IPTR (RX) Diagram

Step 1. Make certain the Pacific X-IPTR has dip switch set at *Off:On:Off* (function as receiver).

Step 2. Connect the **HDMI OUT** to monitor using the appropriate signal cable.

Step 3. Connect a standard CAT-5e/6 Ethernet cable to the **KVMoIP** *(Ethernet) port,* *but leave the other* *end unconnected* *for now.*

Figure 2-13 Connections to the Pacific X-IPRG Diagram

*Step 1. Connect the **HDMI OUT** to monitor using the appropriate signal cable.*

*Step 2. Connect a set of keyboard and mouse to the ⬚⌨ USB type A ports that will be used to perform routing via the **IP TX List** and **IP RX List** tables.*

📄 *When using your mouse with a 4K display, select a mouse that has a 2000 dpi setting.*

*Step 3. Connect a standard CAT-5e/6 Ethernet cable to the **KVMoIP** (Ethernet) port, but leave the other end unconnected for now.*

*Step 4. Connect a standard CAT-5e/6 Ethernet cable to the **IP** (Ethernet) port, but leave the other end unconnected for now.*

Powering Up the Devices

Step 1. Connect power to/and boot-up the six remote computers.

Step 2. Connect power to the four monitor displays and turn on the devices.

Step 3. Connect power to the gigabit IGMP switch.

Step 4. Connect power to the Sequoia UHD/T, Pacific X-IPT, two IPTR-RX, X-IPRW and X-IPRG.

Configuring the Pacific X-IPRG

*Step 1. Connect the other end of a standard CAT-5e/6 Ethernet cable coming from the **IP** (Ethernet) port to the Ethernet port of the gigabit IGMP switch. The distance between the two devices can be up to 100 meters.*

*Notice that the blank **IP TX List** and **IP RX List** tables appear onscreen.*
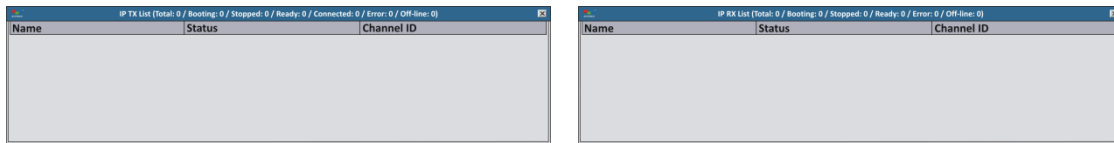
Figure 2-14 Blank **IP TX List** and **IP RX List** Tables

*Step 2. Connect the other end of a standard CAT-5e/6 Ethernet cable coming from the **KVMoIP** (Ethernet) port to the Ethernet port of the gigabit IGMP switch. The distance between the two devices can be up to 100 meters.*

*Notice that information pertaining to the Pacific X-IPRG appears as the first item in the **IP RX List** table.*

*Step 3. Right-click the entry for Pacific X-IPRG and click to select **Rename**.*
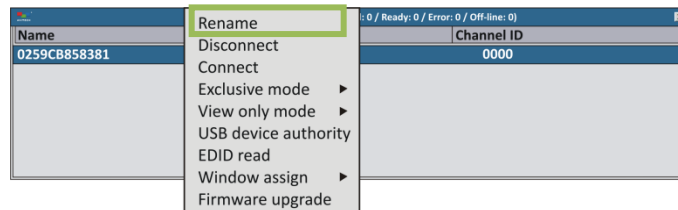
Figure 2-15 Right-click Menu Select **Rename**

Step 4. Replace the name to help you identify this particular device.
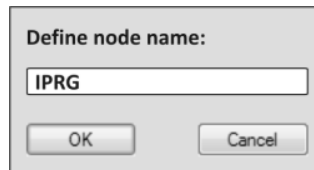
Figure 2-16 Replace the Name

An alternative to steps 3 and 4 above is to double-click the name itself and edit it.

Configuring the Pacific X-IPT

*Step 1. Connect the other end of standard CAT-5e/6 Ethernet cable coming from the **KVMoIP** (Ethernet) port of Pacific X-IPTHc (ID:1) to the Ethernet port of the gigabit IGMP switch. The distance between the two devices can be up to 100 meters.*

*Notice that information pertaining to the Pacific X-IPTHc (ID:1) appears as the first item in the **IP TX List** table.*

*Step 2. Right-click the entry for Pacific X-IPTHc (ID:1) and click to select **Rename**.*
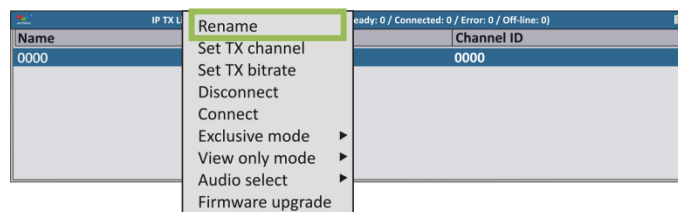
Figure 2-17 Right-click Menu Select **Rename**

Step 3. Replace the name to help you identify this particular TX.

Define node name:

IPT-1

| OK | Cancel |
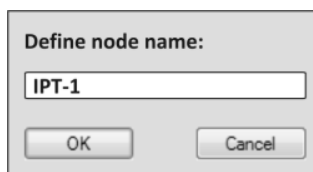
Figure 2-18 Replace the Name

📄 *An alternative to steps 2 and 3 above is to double-click the name itself and edit it.*

*Step 4. Right-click the entry for Pacific X-IPTHc (ID:1) and click to select **Set TX channel**. Change the channel number (**0 ~ 9999**) as this will serve as a reference when pairing with RX.*

TX channel

2252

| OK | Cancel |
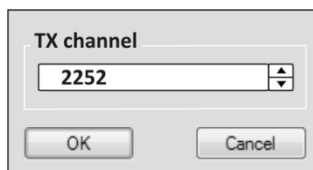
Figure 2-19 Change the Channel Number (0 ~ 9999)

📄 *An alternative to the previous step is to double-click the channel number itself and edit it.*

Step 5. Perform steps 1~4 for Pacific X-IPTHc (ID:2 and 3).

*Step 6. Connect the other end of a gigabit fiber cable coming from the **SFP** port of Pacific X-IPTHf (ID:4) to the SFP port of the gigabit IGMP switch. The distance between the two devices depend on the SFP transceiver module. Repeat steps 2~4 to complete configuration for Pacific X-IPTHf (ID:4).*

*Step 7. Connect the other end of a gigabit fiber cable coming from the **SFP** port of Pacific X-IPTHf (ID:5) to the SFP port of the gigabit IGMP switch. The distance between the two devices depend on the SFP transceiver module. Repeat steps 2~4 to complete configuration for Pacific X-IPTHf (ID:5).*

*Step 8. Connect the other end of standard CAT-5e/6 Ethernet cable coming from the **KVMoIP** (Ethernet) port of Pacific X-IPTVc (ID:6) to the Ethernet port of gigabit IGMP switch. Distance between the two devices can be up to 100 meters. Repeat steps 2~4 to configure Pacific X-IPTVc (ID:6).*

Configuring the Pacific X-IPTR Workstation

*Step 1. Connect the other end of a standard CAT-5e/6 Ethernet cable coming from the **KVMoIP** (Ethernet) port to the Ethernet port of the gigabit IGMP switch. The distance between the two devices can be up to 100 meters.*

*Step 2. Right-click the entry for this newly added Pacific X-IPTR workstation in the **IP RX List** table and click to select **Rename**. Or, double-click the name itself and edit it.*

Step 3. Replace the name to help you identify this particular RX.

Configuring the Pacific X-IPTR

Step 1. Connect the other end of a standard CAT-5e/6 Ethernet cable coming from the **KVMoIP** (Ethernet) port to the Ethernet port of the gigabit IGMP switch. The distance between the two devices can be up to 100 meters.

Step 2. Right-click the entry for this newly added Pacific X-IPTR in the **IP RX List** table and click to select **Rename**. Or, double-click the name itself and edit it.

Step 3. Replace the name to help you identify this particular RX.

Configuring the Pacific X-IPRW

Step 1. Connect the other end of a standard CAT-5e/6 Ethernet cable coming from the **KVMoIP1** (Ethernet) port to the Ethernet port of the gigabit IGMP switch. The distance between the two devices can be up to 100 meters.

Step 2. Right-click the entry for this newly added Pacific X-IPRW in the **IP RX List** table and click to select **Rename**. Or, double-click the name itself and edit it.

Step 3. Replace the name to help you identify this particular RX.

Configuring the Sequoia UHD/T

Step 1. Connect the other end of a standard CAT-5e/6 Ethernet cable coming from the **SUHD-MB/IPT IP** (Ethernet) port to the Ethernet port of the gigabit IGMP switch. The distance between the two devices can be up to 100 meters.

This allows you to access the Sequoia UHD right-click menu items from the Pacific X-IPRW.

Step 2. Connect the other end of a standard CAT-5e/6 Ethernet cable coming from the **SUHD-MB/IPT KVMoIP** (Ethernet) port to the Ethernet port of the gigabit IGMP switch. The distance between the two devices can be up to 100 meters.

Step 3. Right-click the entry for Sequoia UHD/T in the **IP TX List** table and click to select **Rename**. Or, double-click the name itself and edit it.

Step 4. Replace the name to help you identify this particular TX.

Step 5. Change the channel number (**0 ~ 9999**) as this will serve as a reference when pairing with a RX.

Step 6. Connect the other end of a standard CAT-5e/6 Ethernet cable coming from the left **SUHD-IP VIDEO 1 KVMoIP** (Ethernet) port to the Ethernet port of the gigabit IGMP switch. The distance between the two devices can be up to 100 meters.

📄 *It is not necessary to rename this particular RX because the system will automatically assign the name **Local CH-1** to it.*

Step 7. Perform step 6 for RXs associated with the left **SUHD-IP VIDEO 2 KVMoIP** (Ethernet) port as well as for the right **SUHD-IP VIDEO 1/2 KVMoIP** (Ethernet) ports.

📄 *The names **Local CH-2**, **Local CH-3** and **Local CH-4** will be automatically assigned to these.*

Routing TX to RX

To assign TX and RX routing (or pairing), the following methods can be used:

Method 1. On the **IP TX / RX List** tables, use the mouse to drag a TX on top of an RX. **Channel ID** value
for RX will then follow the **Channel ID** value of TX. Or,

Method 2. Click to highlight (select) a TX, then press **Ctrl + C** hotkey, and then click to highlight (select)
a RX, then press **Ctrl + V** hotkey. To assign a TX to multiple RXs, press **Ctrl** prior to clicking
each RX and then press **Ctrl + V** hotkey. **Channel ID** value for multiple RXs will then follow
the **Channel ID** value of TX. Or,

Method 3. Right-click a TX and click **Set TX channel** in the menu. Copy the RX **Channel ID** value that
you wish to assign pairing. (You can also double-click the channel number and edit it
directly.) Or,

Method 4. On the **IP TX List** table, use the mouse to drag a TX on to a window.

EDID Read

Right-click a RX in the **IP RX List** table and click **EDID Read** to toggle automatic detection of EDID from
the display device(s). Default is "On".
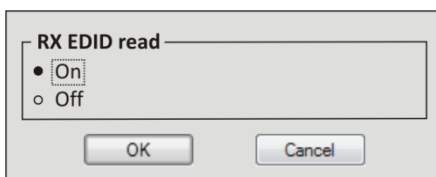
Figure 2-20 "EDID Read" Setting

Scenario 1. Upon switching a signal to a display device connected to RX, the preferred EDID of that
display device will be detected and information updated to the respective source
(connected to TX). Source device will then configure its output based on obtained EDID.

Scenario 2. When routing a signal to multiple display devices routed from the same TX, Sequoia UHD
will assess the preferred EDID of each display device and update the information to the
respective source (connected to TX). Source device will then configure its output based on
the assessed EDID and output at the optimum format supported by all the displays.

📄 _Upon changing the existing routes, the EDID of each display device will be re-assessed and information
updated to the respective source (connected to TX)._

✓ Off

The EDID of the connected display device (connected to RX) will no longer be detected. The source
device (connected to TX) will configure its output based on the latest obtained EDID during which **RX
EDID Read** was on.

📄 _Turning the **RX EDID Read** "Off" will help prevent display blinking during video routing._

Sequoia UHD "Surfer" Mode Limitation

📄 _When a remote source (i.e. TX1) that was routed (paired) to an RX window in Sequoia UHD (i.e. Image 1) is
routed to a second RX (i.e. Pacific X-IPTR), and that Pacific X-IPTR acquires keyboard and mouse control
(by pressing the **LINK ON/OFF** button for five seconds), will cause the Sequoia UHD's "Surfer" feature when
mouse travel enters Image 1's window to be disabled._

To re-enable "Surfer" mode in Sequoia UHD's <u>Remote</u> operation mode, perform the following steps:

*Step 1. Double-click the mouse scroll button or press **Pause/Break** hot-key to exit <u>Remote</u> operation mode and return to <u>Host</u> operation mode in Sequoia UHD.*

Step 2. Route (pair) any other remote source (i.e. TX6) to the Image 1 window so that only one pairing of TX to Pacific X-IPTR window remains.

Step 3. Double-click any of the quad windows in Sequoia UHD to enter <u>Remote</u> operation mode.

Notice that the "Surfer" feature is now functioning in all four "Image" windows.

<u>In summary</u>: Sequoia UHD only allows a dedicated TX pairing (routing) to each of its four RXs. When any of the TX should also be paired (routed) to another RX other than Sequoia UHD, and that RX should acquire keyboard and mouse control, when mouse travel in Sequoia UHD's <u>Remote</u> operation mode (in "Surfer" mode) enters the window with shared TX pairing, "Surfer" mode will be automatically disabled.

2.3.3 Sequoia UHD to 2×2 Video Wall with Pacific X-IPT Connected via Gigabit IGMP Switch

The following figure show a setup of a single Sequoia UHD 2×2 video wall connected to a Pacific X-IPT source via gigabit IGMP switch.

📄 | _DO NOT_ _place any object on the front and side panels of the Sequoia UHD. Doing so may impair its internal components and/or its heat dissipation._
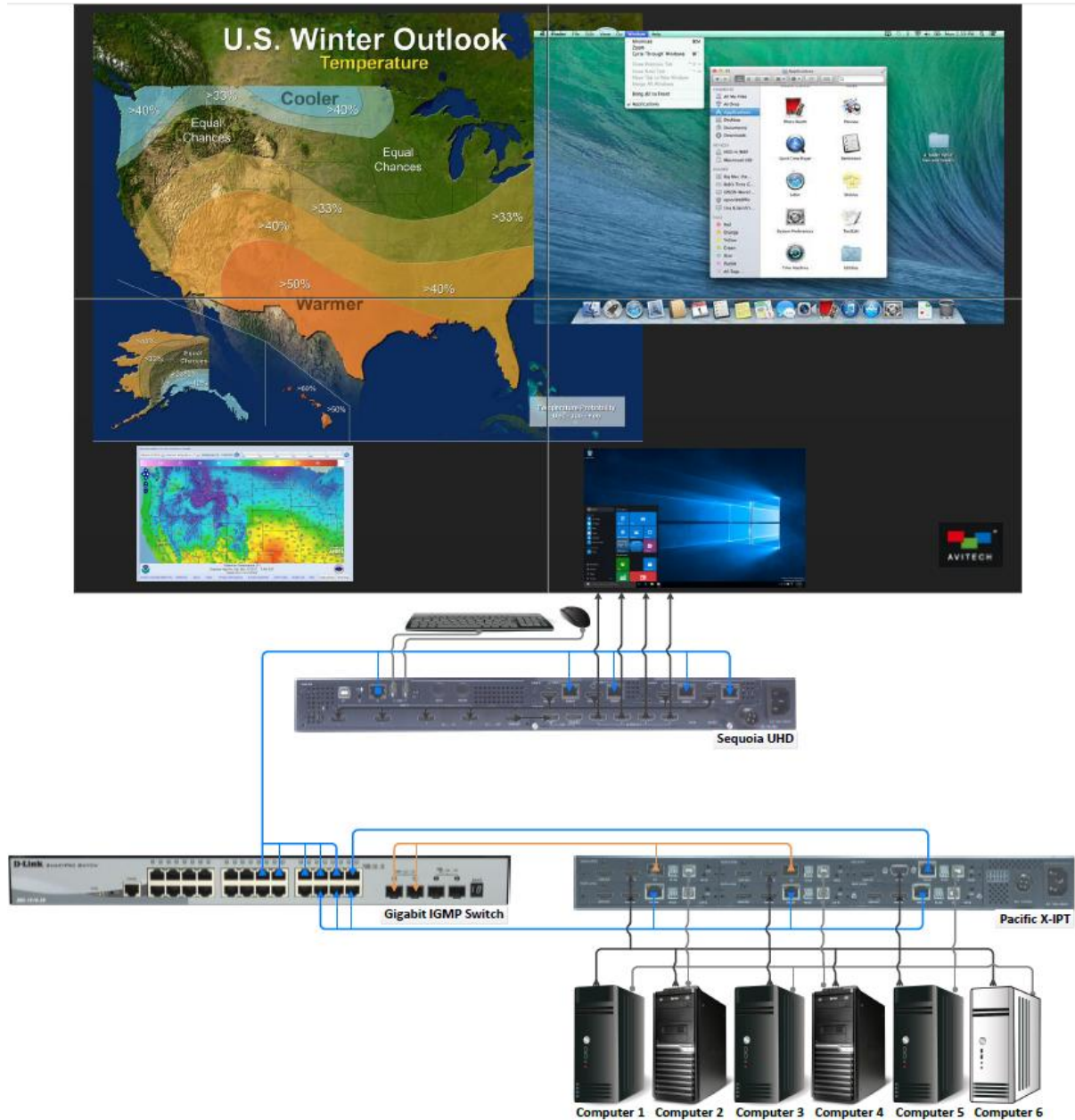
Figure 2-21 Sequoia UHD Video Wall with Pacific X-IPT via Gigabit IGMP Switch Setup

Connections to the Pacific X-IPT
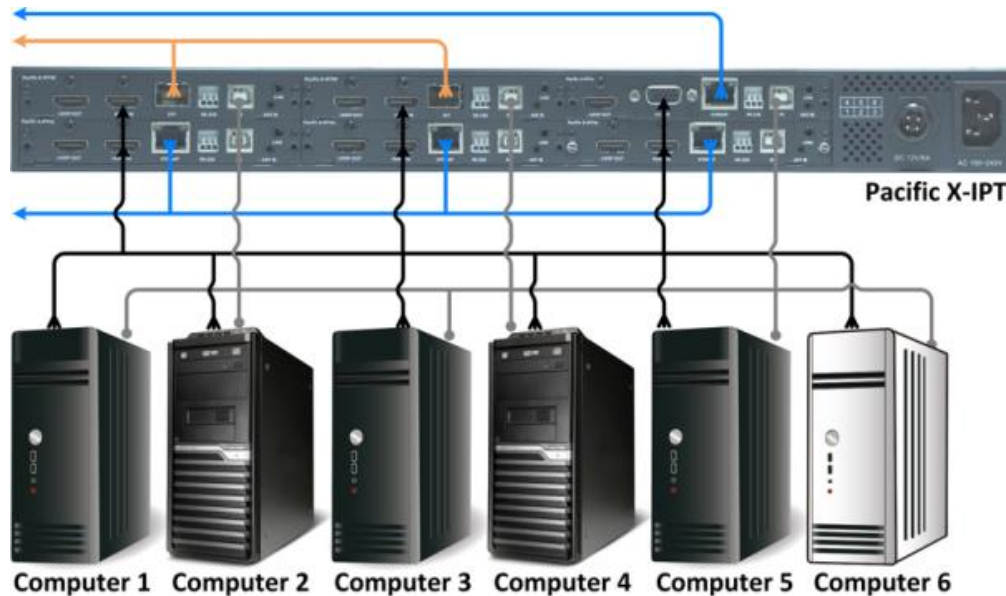
Figure 2-22 Connections to the Pacific X-IPT Diagram

*Step 1. Connect the video sources from remote computer 1~6 to the **HDMI IN / VGA IN** of Pacific X-IPTHc (ID:1~3) / X-IPTHf (ID:4~5) / X-IPTVc (ID:6) using the appropriate signal cable.*

*Be sure to connect the first computer to **HDMI IN** (ID:1), the second computer to **HDMI IN** (ID:2), and so forth.*

*Step 2. Connect USB A/B cables to the remote computer 1~6's USB type A port, and connect the other end to the USB type B port (**PC**) of Pacific X-IPTHc (ID:1~3) / X-IPTHf (ID:4~5) / X-IPTVc (ID:6).*

*1. Be sure to connect the first computer to **PC** (ID:1), the second computer to **PC** (ID:2), and so forth.*
2. (For Windows 2000 users) Upon connecting your Pacific X-IPT to a computer through the USB interface for the first time, perform the Windows' on-screen steps to initialize the USB connection.

*Step 3. Connect standard CAT-5e/6 Ethernet cables to the **KVMoIP** (Ethernet) port of Pacific X-IPTHc (ID:1~3), but leave the other end unconnected for now.*

*Step 4. Connect gigabit fiber cables to the **SFP** port of Pacific X-IPTHf (ID:4~5), but leave the other end unconnected for now.*

*Step 5. Connect a standard CAT-5e/6 Ethernet cable to the **KVMoIP** (Ethernet) port of Pacific X-IPTVc (ID:6), but leave the other end unconnected for now.*

Connections to the Sequoia UHD

Figure 2-23 Connections to the Sequoia UHD Diagram

*Step 1. Connect the video source from the left **SUHD-IP VIDEO 1 HDMI OUT** to the **SUHD-MB HDMI IN 1** using the appropriate signal cable.*

*Step 2. Connect the video source from the left **SUHD-IP VIDEO 2 HDMI OUT** to the **SUHD-MB HDMI IN 2** using the appropriate signal cable.*

*Step 3. Connect the video source from the right **SUHD-IP VIDEO 1 HDMI OUT** to the **SUHD-MB HDMI IN 3** using the appropriate signal cable.*

*Step 4. Connect the video source from the right **SUHD-IP VIDEO 2 HDMI OUT** to the **SUHD-MB HDMI IN 4** using the appropriate signal cable.*

*Step 5. Connect an HDMI cable from the **HDMI OUT** of **SUHD-MB** to the **IN UHD** of **SUHD-2HD**.*

*Step 6. Connect the video source from the **SUHD-2HD HD HDMI OUT 1~4** to the corresponding sequence of video wall screens using the appropriate signal cables. For future reference, we will refer to the video wall's screens as "wall screens."*

*Step 7. Connect a standard CAT-5e/6 Ethernet cable to the **SUHD-MB IP** (Ethernet) port, <u>but leave the other end unconnected</u> for now.*

*Step 8. Connect standard CAT-5e/6 Ethernet cables to the four left and right **SUHD-IP VIDEO 1/2 KVMoIP** (Ethernet) ports, <u>but leave the other end unconnected</u> for now.*

*Step 9. Connect a set of keyboard and mouse to the **K/M** USB type A ports that will be used to perform routing via the **IP TX List** and **IP RX List** tables as well as access the right-click menu.*

📄 | *1. When using your mouse with a 4K display, select a mouse that has a 2000 dpi setting.*
2. Non-standard keyboards (i.e. keyboards with a USB hub, keyboards that need driver installation and programmable keyboards, etc.) are not supported.

Powering Up the Devices

Step 1. Connect power to/and boot-up the six remote computers.

Step 2. Connect power to the video wall screens and turn on the devices.

Step 3. Connect power to the gigabit IGMP switch.

Step 4. Connect power to the Sequoia UHD and Pacific X-IPT.

Configuring the Pacific X-IPT

*Step 1. Connect the other end of standard CAT-5e/6 Ethernet cable coming from the **KVMoIP** (Ethernet) port of Pacific X-IPTHc (ID:1) to the Ethernet port of the gigabit IGMP switch. The distance between the two devices can be up to 100 meters.*

*Step 2. Press **Ctrl**, **Ctrl**, **M** hotkey.*
*Or right-click your mouse anywhere on the wall screens and on the menu appearing, click **Show IP TX/RX list***

Layout preset	▶
Display	▶
Label	▶
Border	▶
Active window border	▶
Video alarm	▶
Display signal format	▶
Tally	▶
Full screen control	▶
Fading level	
Audio routing	
Marquee	
Window drag/resize preview frame	▶
Show IP TX/RX list	
Show IP salvo list	
IP card setup	
Video wall management	
File transfer	▶
System	▶
Hot-key overview	

*to call up the **IP TX List** and **IP RX List** tables.*

*Notice that information pertaining to the Pacific X-IPTHc (ID:1) appears as the first item in the **IP TX List** table.*

*Step 3. Right-click the entry for Pacific X-IPTHc (ID:1) and click to select **Rename**.*

Figure 2-24 Right-click Menu Select **Rename**

Step 4. Replace the name to help you identify this particular TX.
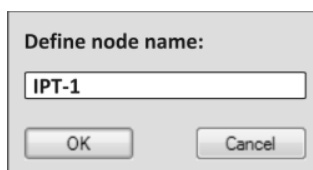
Figure 2-25 Replace the Name

An alternative to steps 3 and 4 above would be to double-click the name and edit it directly.

*Step 5. Right-click the entry for Pacific X-IPTHc (ID:1) and click to select **Set TX channel**. Change the channel number (**0 ~ 9999**) as this will serve as reference when pairing with RX.*
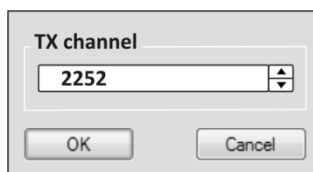
Figure 2-26 Change the Channel Number (0 ~ 9999)

An alternative to the previous step would be to double-click the channel number and edit it directly.

Step 6. Perform steps 1~5 for Pacific X-IPTHc (ID:2 and 3).

*Step 7. Connect the other end of a gigabit fiber cable coming from the **SFP** port of Pacific X-IPTHf (ID:4) to the SFP port of the gigabit IGMP switch. The distance between the two devices depend on the SFP transceiver module. Repeat steps 2~5 to complete configuration for Pacific X-IPTHf (ID:4).*

*Step 8. Connect the other end of a gigabit fiber cable coming from the **SFP** port of Pacific X-IPTHf (ID:5) to the SFP port of the gigabit IGMP switch. The distance between the two devices depend on the SFP transceiver module. Repeat steps 2~5 to complete configuration for Pacific X-IPTHf (ID:5).*

*Step 9. Connect the other end of standard CAT-5e/6 Ethernet cable coming from the **KVMoIP** (Ethernet) port of Pacific X-IPTVc (ID:6) to the Ethernet port of gigabit IGMP switch. Distance between the two devices can be up to 100 meters. Repeat steps 2~5 to configure Pacific X-IPTVc (ID:6).*

Configuring the Sequoia UHD

Step 1. Connect the other end of a standard CAT-5e/6 Ethernet cable coming from the **SUHD-MB IP** (Ethernet) port to the Ethernet port of the gigabit IGMP switch. The distance between the two devices can be up to 100 meters.

Step 2. Connect the other end of a standard CAT-5e/6 Ethernet cable coming from the left **SUHD-IP VIDEO 1 KVMoIP** (Ethernet) port to the Ethernet port of the gigabit IGMP switch. The distance between the two devices can be up to 100 meters.

📄 *It is not necessary to rename this particular RX because the system will automatically assign the name **Local CH-1** to it.*

Step 3. Perform step 2 for RXs associated with the left **SUHD-IP VIDEO 2 KVMoIP** (Ethernet) port as well as for the right **SUHD-IP VIDEO 1/2 KVMoIP** (Ethernet) ports.

📄 *The names **Local CH-2**, **Local CH-3** and **Local CH-4** will be automatically assigned to these.*

Routing TX to RX

To assign TX and RX routing (or pairing), the following methods can be used:

Method 1. On the **IP TX / RX List** tables, use the mouse to drag a TX on top of an RX. **Channel ID** value for RX will then follow the **Channel ID** value of TX. Or,

Method 2. Click to highlight (select) a TX, then press **Ctrl + C** hotkey, and then click to highlight (select) a RX, then press **Ctrl + V** hotkey. To assign a TX to multiple RXs, press **Ctrl** prior to clicking each RX and then press **Ctrl + V** hotkey. **Channel ID** value for multiple RXs will then follow the **Channel ID** value of TX. Or,

Method 3. Right-click a TX and click **Set TX channel** in the menu. Copy the RX **Channel ID** value that you wish to assign pairing. (You can also double-click the channel number and edit it directly.) Or,

Method 4. On the **IP TX List** table, use the mouse to drag a TX on to a window.

2.3.4 Two Sequoia UHD/T+ to 2×3 Video Wall with Two Pacific X-IPT Connected via Gigabit IGMP Switch

The following figure show a setup of a two Sequoia UHDs 2×3 video wall connected to two Pacific X-IPT sources via gigabit IGMP switch.

> *DO NOT* place any object on the front and side panels of the Sequoia UHD. Doing so may impair its internal components and/or its heat dissipation.
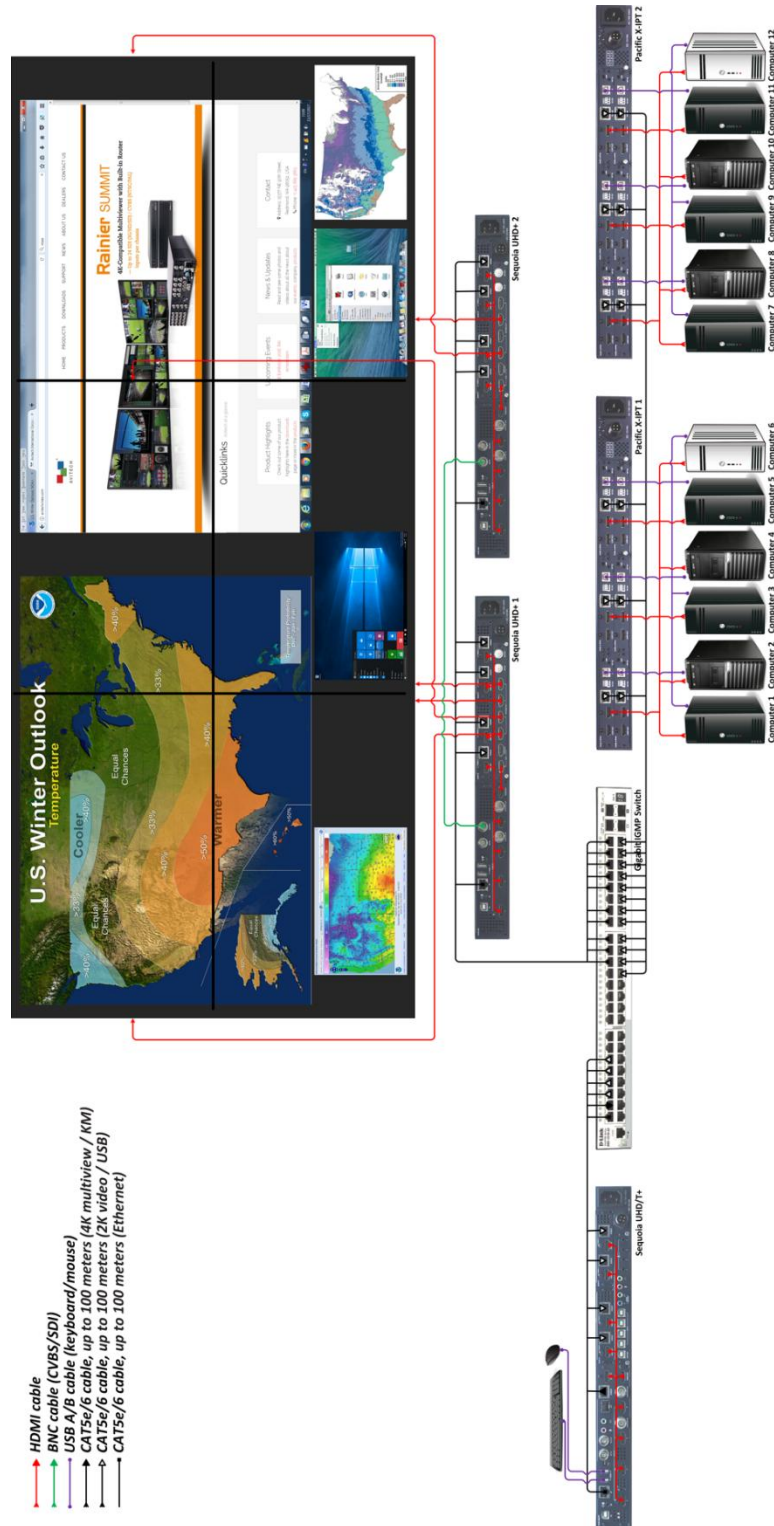
Figure 2-27 Two Sequoia UHDs Video Wall with Two Pacific X-IPT via Gigabit IGMP Switch Setup

Connections to the Two Pacific X-IPT
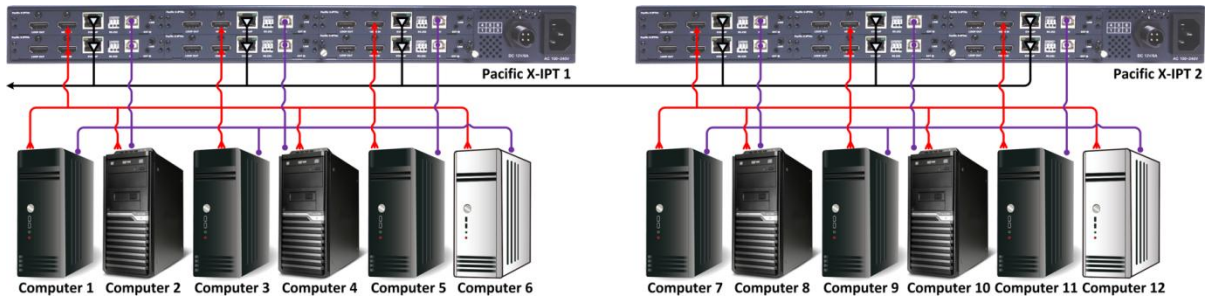
Figure 2-28 Connections to the Two Pacific X-IPT Diagram

*Step 1. Connect the video sources from remote computer 1~12 to the **HDMI IN** of Pacific X-IPTHc (ID:1~12) using the appropriate signal cable.*

📄 *Be sure to connect the first computer to **HDMI IN** (ID:1), the second computer to **HDMI IN** (ID:2), and so forth.*

*Step 2. Connect USB A/B cables to the remote computer 1~12's USB type A port, and connect the other end to the USB type B port (**PC**) of Pacific X-IPTHc (ID:1~12).*

📄 *1. Be sure to connect the first computer to **PC** (ID:1), the second computer to **PC** (ID:2), and so forth.*
2. (For Windows 2000 users) Upon connecting your Pacific X-IPT to a computer through the USB interface for the first time, perform the Windows' on-screen steps to initialize the USB connection.

*Step 3. Connect standard CAT-5e/6 Ethernet cables to the **KVMoIP** (Ethernet) port of Pacific X-IPTHc (ID:1~12), but leave the other end unconnected for now.*

Connections of the Two Sequoia UHD+ Connect to Wall Display

📄 *Before proceeding with multiple Sequoia UHD+ configuration, be sure that each Sequoia UHD+ is set to a unique IP address (default is **192.168.0.5**). Use the right-click menu **System** > **Network**.*
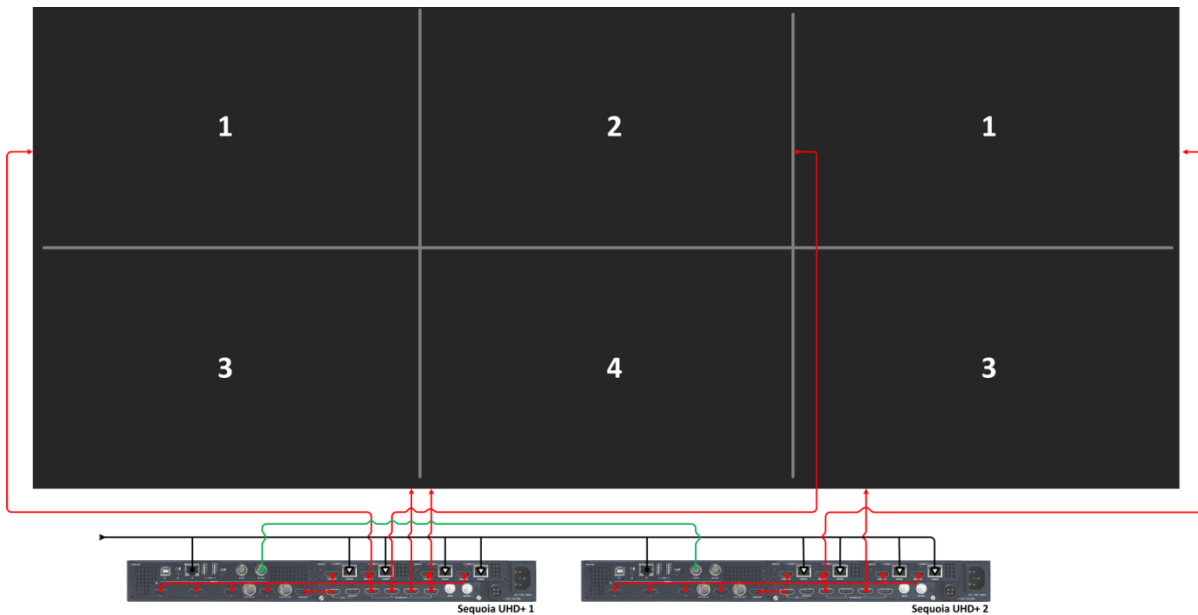
Figure 2-29 Connections to the Two Sequoia UHD+ With Wall Display Diagram

On the Sequoia UHD+ 1

*Step 1. Connect the video source from the left **SUHD-IP VIDEO 1 HDMI OUT** to the **SUHD-MB HDMI IN 1** using the appropriate signal cable.*

*Step 2. Connect the video source from the left **SUHD-IP VIDEO 2 HDMI OUT** to the **SUHD-MB HDMI IN 2** using the appropriate signal cable.*

*Step 3. Connect the video source from the right **SUHD-IP VIDEO 1 HDMI OUT** to the **SUHD-MB HDMI IN 3** using the appropriate signal cable.*

*Step 4. Connect the video source from the right **SUHD-IP VIDEO 2 HDMI OUT** to the **SUHD-MB HDMI IN 4** using the appropriate signal cable.*

*Step 5. Connect an HDMI cable from the **HDMI OUT** of **SUHD-MB** to the **IN UHD** of **SUHD-2HD**.*

*Step 6. Connect the video source from the **SUHD-2HD HD HDMI OUT 1~4** to the corresponding sequence of video wall screens using the appropriate signal cables. For future reference, we will refer to the video wall's screens as "wall screens." (See the above figure as guide.)*

*Step 7. Connect a standard CAT-5e/6 Ethernet cable to the **SUHD-MB IP** (Ethernet) port, <u>but leave the other end unconnected</u> for now.*

*Step 8. Connect standard CAT-5e/6 Ethernet cables to the four left and right **SUHD-IP VIDEO 1/2 KVMoIP** (Ethernet) ports, <u>but leave the other end unconnected</u> for now.*

> *1. When using your mouse with a 4K display, select a mouse that has a 2000 dpi setting.*
> *2. Non-standard keyboards (i.e. keyboards with a USB hub, keyboards that need driver installation and programmable keyboards, etc.) are not supported.*

On the Sequoia UHD+ 2

Step 1. Perform steps 1~5 just like for the above Sequoia UHD+ 1.

*Step 2. Connect the video source from the **SUHD-2HD HD HDMI OUT 1** and **3** to the corresponding sequence of video wall screens using the appropriate signal cables. (See the above figure as guide.)*

Step 3. Perform steps 7~8 just like for the above Sequoia UHD+ 1.

*Step 4. Connect a BNC cable from the **REF OUT** of Sequoia UHD+ 1 **SUHD-MB** to the **REF IN** of Sequoia UHD+ 2 **SUHD-MB**.*

Connections to the Controlling Sequoia UHD/T+
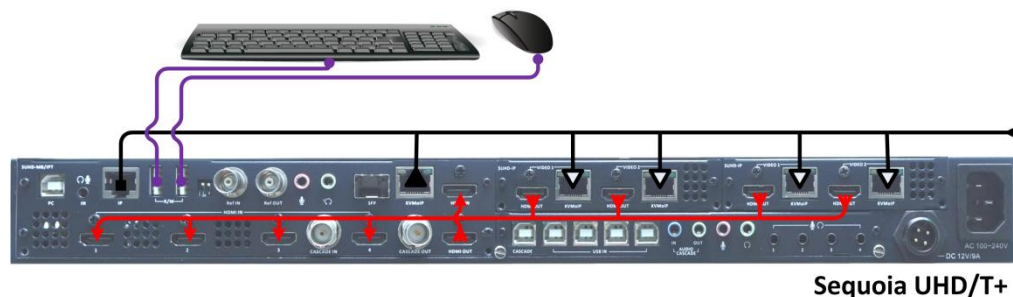
Sequoia UHD/T+

Figure 2-30 Connections to the Sequoia UHD/T+ Diagram

Step 1. Connect the video source from the left **SUHD-IP VIDEO 1 HDMI OUT** to the **SUHD-MB/IPT HDMI IN 1** using the appropriate signal cable.

Step 2. Connect the video source from the left **SUHD-IP VIDEO 2 HDMI OUT** to the **SUHD-MB/IPT HDMI IN 2** using the appropriate signal cable.

Step 3. Connect the video source from the right **SUHD-IP VIDEO 1 HDMI OUT** to the **SUHD-MB/IPT HDMI IN 3** using the appropriate signal cable.

Step 4. Connect the video source from the right **SUHD-IP VIDEO 2 HDMI OUT** to the **SUHD-MB/IPT HDMI IN 4** using the appropriate signal cable.

Step 5. Connect an HDMI cable from the **HDMI OUT** to the **HDMI IN** of **SUHD-MB**.

Step 6. Connect a standard CAT-5e/6 Ethernet cable to the **SUHD-MB/IPT IP** (Ethernet) port, but leave the other end unconnected for now.

Step 7. Connect a standard CAT-5e/6 Ethernet cable to the **SUHD-MB/IPT KVMoIP** (Ethernet) port, but leave the other end unconnected for now.

Step 8. Connect standard CAT-5e/6 Ethernet cables to the four left and right **SUHD-IP VIDEO 1/2 KVMoIP** (Ethernet) ports, but leave the other end unconnected for now.

Step 9. Connect a set of keyboard and mouse to the **K/M** USB type A ports that will be used to perform routing via the **IP TX List** and **IP RX List** tables, access the right-click menu, as well as setup the video wall's bezel gap.

Powering Up the Devices

Step 1. Connect power to/and boot-up the twelve remote computers.

Step 2. Connect power to the video wall screens and turn on the devices.

Step 3. Connect power to the gigabit IGMP switch.

Step 4. Connect power to the three Sequoia UHD and two Pacific X-IPT.

Configuring the Two Pacific X-IPT

Step 1. Connect the other end of standard CAT-5e/6 Ethernet cable coming from the **KVMoIP** (Ethernet) port of Pacific X-IPTHc (ID:1) to the Ethernet port of the gigabit IGMP switch. The distance between the two devices can be up to 100 meters.

Step 2. *Press **Ctrl**, **Ctrl**, **M** hotkey.*
*Or right-click your mouse anywhere on the wall screens and on the menu appearing, click **Show IP TX/RX list***

Layout preset	▶
Display	▶
Label	▶
Border	▶
Active window border	▶
Video alarm	▶
Display signal format	▶
Tally	▶
Full screen control	▶
Fading level	
Audio routing	
Marquee	
Window drag/resize preview frame	▶
Show IP TX/RX list	
Show IP salvo list	
IP card setup	
Video wall management	
File transfer	▶
System	▶
Hot-key overview	

*to call up the **IP TX List** and **IP RX List** tables.*

*Notice that information pertaining to the Pacific X-IPTHc (ID:1) appears as the first item in the **IP TX List** table.*

Step 3. *Right-click the entry for Pacific X-IPTHc (ID:1) and click to select **Rename**.*
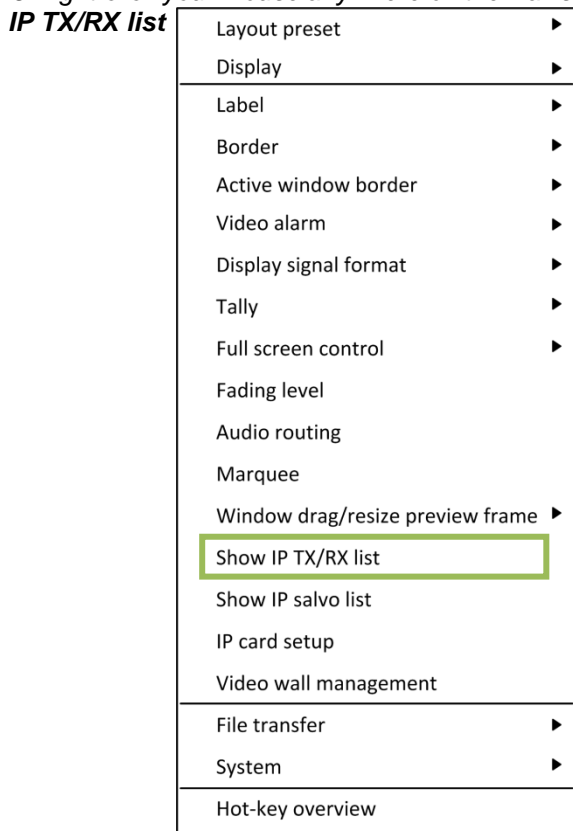
	IP TX L...	Rename ...eady: 0 / Connected: 0 / Error: 0 / Off-line: 0)
Name		Set TX channel ... Channel ID
0000		Set TX bitrate ... 0000
		Disconnect
		Connect
		Exclusive mode ▶
		View only mode ▶
		Audio select ▶
		Firmware upgrade
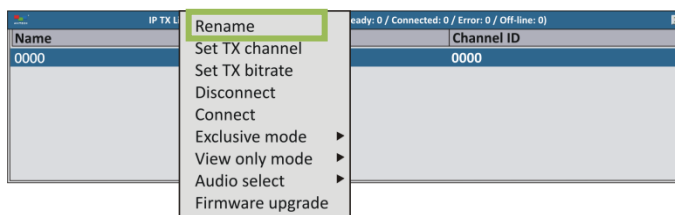
Figure 2-31 Right-click Menu Select **Rename**

Step 4. *Replace the name to help you identify this particular TX.*

Define node name:

IPT-1

OK   Cancel
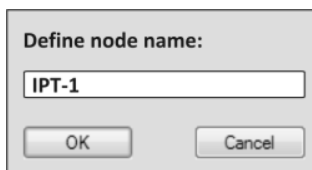
Figure 2-32 Replace the Name

An alternative to performing steps 3 and 4 above would be double-click the name and edit it directly.

*Step 5. Right-click the entry for Pacific X-IPTHc (ID:1) and click to select **Set TX channel**. Change the channel number (**0 ~ 9999**) as this will serve as reference when pairing with RX.*
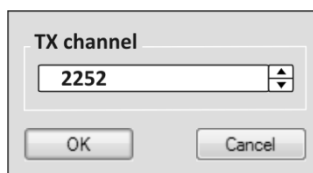
Figure 2-33 Change the Channel Number (0 ~ 9999)

📄 *An alternative to performing the previous step would be to double-click the channel number and edit it directly.*

Step 6. Perform steps 1~5 for Pacific X-IPTHc (ID:2~12).

Configuring the Controlling Sequoia UHD/T+ as well as Sequoia UHD+ 1 and 2

*Step 1. Connect the other end of a standard CAT-5e/6 Ethernet cable coming from the controlling Sequoia UHD/T+'s **SUHD-MB IP** (Ethernet) port to the Ethernet port of the gigabit IGMP switch. The distance between the two devices can be up to 100 meters.*

*Step 2. Connect the other end of a standard CAT-5e/6 Ethernet cable coming from the controlling Sequoia UHD/T+'s left **SUHD-IP VIDEO 1 KVMoIP** (Ethernet) port to the Ethernet port of the gigabit IGMP switch. The distance between the two devices can be up to 100 meters.*

📄 *System will automatically assign the name **Local CH-1** to it so it is up to the end user whether to assign a new name.*

*Step 3. Perform step 2 for RXs associated with the controlling Sequoia UHD/T+'s left **SUHD-IP VIDEO 2 KVMoIP** (Ethernet) port as well as for the right **SUHD-IP VIDEO 1/2 KVMoIP** (Ethernet) ports.*

📄 *The names **Local CH-2**, **Local CH-3** and **Local CH-4** will be automatically assigned to these so it is up to the end user whether to assign a new name.*

*Step 4. Perform steps 1~3 again for Sequoia UHD+ 1. The names **Local CH-1**, **Local CH-2**, **Local CH-3** and **Local CH-4** will again be automatically assigned to its RX so it is highly recommended to change it to a unique name.*

*Step 5. Perform steps 1~3 again for Sequoia UHD+ 2. The names **Local CH-1**, **Local CH-2**, **Local CH-3** and **Local CH-4** will again be automatically assigned to its RX so it is highly recommended to change it to a unique name.*

Routing TX to RX

To assign TX and RX routing (or pairing), the following methods can be used:

*Method 1. On the **IP TX / RX List** tables, use the mouse to drag a TX on top of an RX. **Channel ID** value for RX will then follow the **Channel ID** value of TX. Or,*

*Method 2. Click to highlight (select) a TX, then press **Ctrl + C** hotkey, and then click to highlight (select) a RX, then press **Ctrl + V** hotkey. To assign a TX to multiple RXs, press **Ctrl** prior to clicking each RX and then press **Ctrl + V** hotkey. **Channel ID** value for multiple RXs will then follow the **Channel ID** value of TX. Or,*

*Method 3. Right-click a TX and click **Set TX channel** in the menu. Copy the RX **Channel ID** value that you wish to assign pairing. (You can also double-click the channel number and edit it.) Or,*

*Method 4. On the **IP TX List** table, use the mouse to drag a TX on to a window.*

3. Basic Operations

The Sequoia UHD always operates in one of its two operating modes: <u>Host</u> and <u>Remote</u> mode. Users are allowed to freely switch between these two modes anytime during the operation for different uses. This chapter discusses these operating modes, their functions, and hot-keys in detail.

<u>Host Mode</u>

<u>On the multiview display:</u>
*When Sequoia UHD is in <u>Host</u> mode, the <u>Host</u> cursor appears on the display upon connecting a mouse device to the Sequoia UHD's **K/M** USB type A ports. The cursor will be controlled by this locally connected mouse. <u>Host</u> mode provides a monitoring solution for the incoming computer/video signals. Users can use the <u>Host</u> cursor to select and adjust window size, position, and display layout directly through the on-screen interface. Other features such as the mouse right-click menu and the auto-hide menu are features of this mode to enhance ease of control and operation and are discussed in detail in chapter 4 and Appendix C.*

📄 | *Upon re-connecting a keyboard or mouse, the <u>Host</u> cursor may disappear. Move the mouse to allow it to re-appear.*

<u>On the second display:</u>
Control the computer as you regularly would through the corresponding window on the display without the need for the pop-up selections, right-click menu or auto-hide menu.

<u>In summary:</u>
As long as you are in <u>Host</u> mode, upon moving the <u>Host</u> cursor to the left or right edge of the multiview display or second monitor will cause the <u>Host</u> cursor to jump to the second monitor or multiview display and vice versa.

<u>Remote Mode</u>

<u>On the multiview display with "Surfer" feature:</u>
*When Sequoia UHD enters <u>Remote</u> mode, the <u>Host</u> cursor disappears, and the "<u>Surfer</u>" feature is enabled. Notice that the window's border will turn "yellow", this signifies that your Sequoia UHD is now in <u>Remote</u> mode with "Surfer" function. Entering <u>Remote</u> mode, your Sequoia UHD transfer keyboard and mouse control to the selected computer system. You can then control the computer as you regularly would within the window on the display. Your Sequoia UHD can only enter <u>Remote</u> mode to take control of a computer when the correct USB type B port (**USB IN 1 ~ 4**) on your Sequoia UHD's rear panel is properly connected to the USB type A port of that computer (using a standard USB A/B cable). In addition, only windows corresponding to computer systems (as opposed to pure video systems) can be accessed through <u>Remote</u> mode.*

<u>On the second display:</u>
Control the computer as you regularly would through the corresponding window on the display without the need for the pop-up selections, right-click menu or auto-hide menu.

<u>In summary:</u>
Whether you are in the multiview display's <u>Remote</u> mode with "Surfer" function or <u>Host</u> mode, upon moving the cursor away from the multiview monitor to the second monitor with full screen display, the system basically switches the mouse to <u>Remote</u> mode automatically.

<u>Tips on Navigating the Sequoia UHD:</u>

❖ *A maximum of four plus one computers can be connected to a single Sequoia UHD. The Sequoia UHD puts the images of four computers onto four windows and simultaneously displays them on the monitor. Instant switching of inputs through the user interface is supported; thus, any of the four plus one computers can be monitored and controlled on the dual displays.*

❖ *When <u>Host</u> mode is active, use the mouse connected to your Sequoia UHD to resize and reposition windows on the display.*

❖ *To switch from <u>Host</u> mode to <u>Remote</u> mode, move the <u>Host</u> cursor to the top-right corner of the targeted window and then click the **Enter remote mode** ▣ icon (or double-click your mouse's left button any area within that window).*

❖ *When entering <u>Remote</u> mode ("Surfer" feature is automatically active), your Sequoia UHD automatically transfers its keyboard and mouse control to the selected computer. Use the keyboard and mouse to control that computer as you regularly would.*

❖ *To switch back to <u>Host</u> mode, use the keyboard **Pause/Break** hot-key, or double-click the mouse scroll button. The Sequoia UHD will return to <u>Host</u> mode and the <u>Host</u> cursor will reappear.*

3.1   Host Mode

In <u>Host</u> mode, users can monitor images of the connected computers and adjust four windows at a time using the provided selections and menu. Basic operations allowed in <u>Host</u> mode are mentioned below.

3.1.1 Pop-up Selections

Upon moving the <u>Host</u> cursor to the top-right corner of a window, the following pop-up selections will appear:

❖ ▣ *Swap: enable a window to switch its position with the other window*

❖ ▣ *Enter Remote mode: enter <u>Remote</u> operation mode and control the computer corresponding to the window*

❖ ▣ *Full screen: set a window to full screen*

❖ ▣ *Restore: return from a full-screen view to previous layout*

❖ ◀)) *HDMI audio: embedded audio output in HDMI signal is enabled*

❖ ◀ *HDMI audio: embedded audio output in HDMI signal is disabled*

❖ ◯ *Headphone: audio output via headphone is enabled*

❖ ◯ *Headphone: audio output via headphone is disabled*

📄 | *When Sequoia UHD detects that a particular computer's USB port is not connected, the **Enter remote mode** ▣ pop-up icon on the corresponding window will be grayed-out.*

3.1.2 Functions (multiview display)

The Sequoia UHD allows free window resize/reposition directly through its' on-screen user interface. The following is a list of summarized functions available in <u>Host</u> mode; additional functions can be referred to chapter 4 in detail.

Function	
Window resizing	Drag any of the four corners or edges of a window to a desired size
Window repositioning	Drag a window to a desired position

Function	
Window position swapping	Move the <u>Host</u> cursor to the top-right corner of a window; click the icon. Then move the <u>Host</u> cursor to another window and click anywhere to swap two windows' including label's positions. The image/video size may change according to the two positions' former window size.
Full screen window	Move the <u>Host</u> cursor to the top-right corner of a window; click the icon and then the window will maximize to full screen. Click the icon to return from full screen.
Access a remote computer	Move the <u>Host</u> cursor to the top-right corner of a window; click icon to enter <u>Remote</u> mode to the corresponding computer. The icon will be disabled if a window does not correspond to a computer system, or if the USB connection between the Sequoia UHD and the computer fails.
Enable/disable HDMI embedded audio	Move the <u>Host</u> cursor to the top-right corner of a window; click (corresponds to red left tally ▟ as well as right-click menu item "**Audio routing** > **HDMI output** > **Mute**" enabled) icon to enable output of HDMI embedded audio of corresponding computer. Click the (corresponds to green left tally ▟ as well as right-click menu item "**Audio routing** > **HDMI output** > **Mute**" disabled) icon to disable output of HDMI embedded audio.
Enable/disable Headphone audio	Move the <u>Host</u> cursor to the top-right corner of a window; click (corresponds to red right tally ◢ as well as right-click menu item "**Audio routing** > **Headphone** > **Mute**" enabled) icon to enable output of headphone audio of corresponding computer. Click the (corresponds to green right tally ◢ as well as right-click menu item "**Audio routing** > **Headphone** > **Mute**" disabled) icon to disable output of headphone audio.

Table 3-1 <u>Host</u> Mode Functions

3.1.3 <u>Hot-keys</u>

Hot-keys are available when utilizing the Sequoia UHD under the <u>Host</u> operation mode. Detailed below are the <u>Host</u> operation mode hot-keys.

Keys	
Ctrl + **F1** or **F2** or **F3** or **F4**	This loads the window to full screen mode, while making the other window(s) fade from view; where **F#** is the image window number (i.e. **Ctrl** + **F1** will call up the **Image 1** window).
Ctrl + **1** or **2** or **3** or **4**	Toggle an image/window in the multiview display off and on (i.e. **Ctrl** + **1** will turn off/on the **Image 1** window).
Ctrl + **S**	Saves the display configuration as the latest preset to the Sequoia UHD so that on the next boot-up the latest preset will be loaded.
Page Up/ **Page Down**	Switch between the three factory-default quad layout presets.
↑	Load the previous user-created preset file.
↓	Load the next user-created preset file.
Ctrl + **Shift** + **Alt** + **F10**	Toggle "Surfer" feature off/on; moving mouse to a border shared with another computer will cause the keyboard and mouse to control the other computer.
Ctrl, **Ctrl**, **M**	Toggles on/off the **IP TX List** table (default position – lower left) showing all the **TX** (transmitters); as well as displaying the **IP RX List** table (default position – lower right) showing all the **RX** (receivers) detected by your Sequoia UHD.

Keys	
Ctrl, **Ctrl**, **S**	Toggles the Salvo setup window on/off.

<center>**Table 3-2** Hot-keys of <u>Host</u> Operation Mode</center>

3.2 Remote Mode

The following hot-keys are available when utilizing your Sequoia UHD under <u>Remote</u> mode.

Keys	
Pause Break	Exits from <u>Remote</u> mode and returns to <u>Host</u> mode.
Ctrl + **Pause Break**	Switch control from window 1 up to window 4, and then back to window 1. If only one computer is connected, then no cycling will occur. Make sure to press the **Ctrl** key first. Pressing the **Pause/Break** key first will just remove you from <u>Remote</u> mode.
Shift + **Pause Break**	Switch control backward from window 1→window 4→window 3→window 2→window 1. If only one computer is connected, then no cycling will occur. Make sure to press the **Shift** key first. Pressing the **Pause/Break** key first will just remove you from <u>Remote</u> mode.
Shift Shift 1 or **2** or **3** or **4**	Randomly switch control between window 1 up to window 4. If upon switching to a window without KM function (no keyboard/mouse connected) then system will exit <u>Remote</u> mode and return to <u>Host</u> mode.
Ctrl + **Shift** + **Alt** + **F10**	Toggle "Surfer" feature off/on; moving mouse to a border shared with another computer will cause the keyboard and mouse to control the other computer.

<center>**Table 3-3** Hot-keys of <u>Remote</u> Mode</center>

*When using a keyboard without "**Pause/Break**" key, use "**control** + **option (Alt)** + **shift** + **p**" instead to perform <u>Remote</u> mode to <u>Host</u> mode switch.*
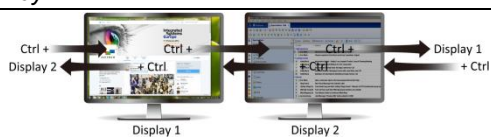
The following hot-keys are available when utilizing your Sequoia UHD on the fifth computer.

Keys	
Ctrl + **Alt** + **L** or **R**	<u>Host</u> cursor to return from the second monitor to the multiview display. Mouse cursor will be in the center position of the multiview display.

<center>**Table 3-4** Hot-keys When Utilizing Your Sequoia UHD on the Fifth Computer</center>

The following hot-keys are available when utilizing your Sequoia UHD under full screen <u>Remote</u> mode.

Keys	
	 Image 1 window Image 2 window Image 3 window Image 4 window
Shift + move the mouse to the left/ right sides of the window	For "Image" window control switching action upon pressing the **Shift** key plus moving the mouse to the left/right sides of the window. Moving the mouse from one "Image" window to the next transfers control from the former window to the latter one. _Note_: _No "Image" window control switching action will occur when moving the mouse to the top and bottom of the window, as well as moving the mouse to the left and right sides of the window without pressing the **Shift** key._
	 Display 1 Display 2
Ctrl + move the mouse to the left/ right sides of the monitor display	For monitor control switching action upon pressing the **Ctrl** key plus moving the mouse to the left/right sides of the full screen display monitors. Moving the mouse from one full screen monitor to the next transfers control from the former window to the latter one. _Note_: _No full screen monitor control switching action will occur when moving the mouse to the top and bottom of the monitor display, as well as moving the mouse to the left and right sides of the full screen monitor without pressing the **Ctrl** key._

Table 3-5 Hot-keys for "Image" Window Control Switching and Monitor Control Switching

4. Using the Mouse Right-click Menu, Changing the Background Image and Salvo

4.1 Mouse Right-click Menu

The mouse right-click menu contains a collective of display and feature settings for the Sequoia UHD such as customization of the user interface, presets save/load, alarm setup, audio routing, file transfer, and hot-key hint. The menu, as shown in the figure below, can be called upon by right-clicking anywhere on the on-screen interface when the Sequoia UHD is in <u>Host</u> mode (default window border color is gray).

📄 *When the mouse right-click menu is open, mouse travel to the fifth computer's monitor is not allowed.*

This appendix discusses each item listed on the mouse right-click menu.

Layout preset	▶
Display	▶
Label	▶
Border	▶
Active window border	▶
Video alarm	▶
Display signal format	▶
Tally	▶
Full screen control	▶
Fading level	
Audio routing	
Marquee	
Window drag/resize preview frame	▶
Show IP TX/RX list	
Show IP salvo list	
IP card setup	
Video wall management	
File transfer	▶
System	▶
Hot-key overview	

Figure 4-1 Mouse Right-click Menu
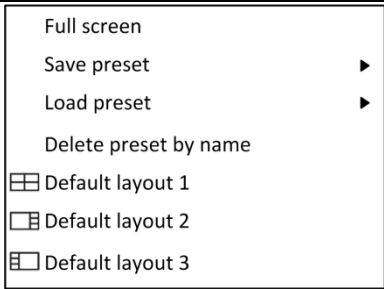
Layout preset	Full screen Save preset ▶ Load preset ▶ Delete preset by name ⊞ Default layout 1 ☐⊟ Default layout 2 ⊟☐ Default layout 3 Select between a **Full screen** display, a quad display (**Default layout 1** – default); 1 (large) + 3 (smaller windows) display (**Default layout 2**); 3 (smaller windows) + 1 (large) display (**Default layout 3**) arrangement.
Save preset	Save to preset Save to latest Presets are files that contain user-configured display layouts with adjusted settings. They allow users to keep their desired layouts for later use without the need to repeatedly perform the same configuration. Saved presets are stored to the Sequoia UHD's flash memory and can be loaded anytime during the operation. To save a preset, perform the following steps: *Step 1. Configure a new display layout and change settings if desired.* *Step 2. Click **Save to preset**. A pop-up window with a default file name will appear on the display.* File name (*.json): ┃PRESET_6.json ▼ 　　OK　　　Cancel *Step 3. Edit the file name if desired (the file extension json will automatically be added to the file name), and then click **OK** to save the file. Special characters allowed are "_" (underline), "-" (dash), and "." (period) only. Repeat steps 1-3 for each additional preset.* Alternatively, click **Save to latest**, and then click **Load latest** (refer to **Load preset**). Your Sequoia UHD will immediately recall the display layout that was last **Save to latest**.
Load preset	Load from saved preset Load latest Load factory default preset Load a preset previously created by clicking **Load from saved preset**, and then select the desired file from the pop-up window. 📄 PRESET_1.json 📄 PRESET_2.json 📄 PRESET_3.json 📄 PRESET_4.json 📄 PRESET_5.json File name: 　　　　　　Open Files of type: JSON (*.json) ▼　Cancel Alternatively, click **Load latest** to load the window layout that was last saved using **Save to latest**. This layout will also be the master layout which gets loaded when your Sequoia UHD is powered on. Or, click **Load factory default preset** for the default layout if desired.
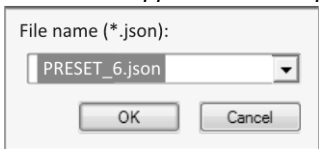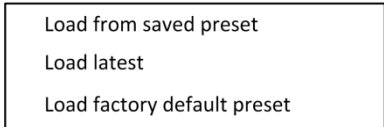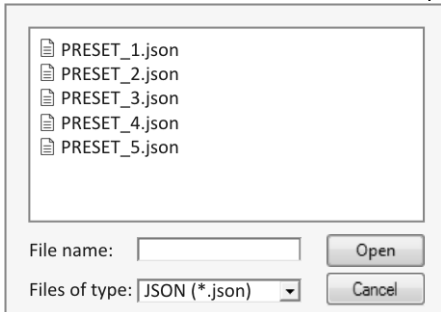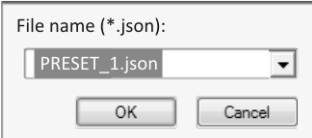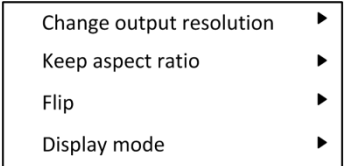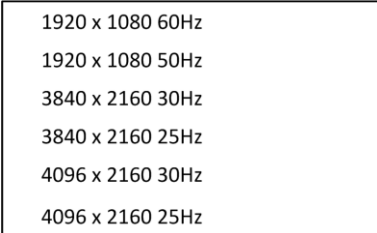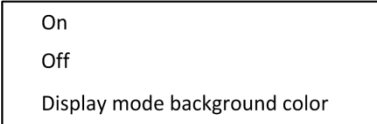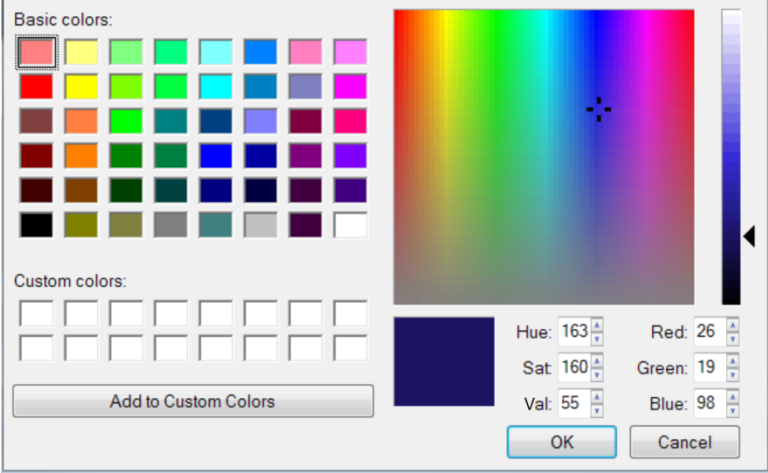
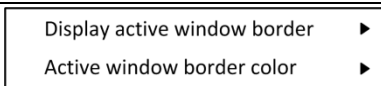|	
Delete preset by name	File name (*.json): PRESET_1.json ▼ OK Cancel
	Delete a saved preset file appearing on the list of the drop-down menu.
Display	Change output resolution ▶ Keep aspect ratio ▶ Flip ▶ Display mode ▶
Change output resolution	1920 x 1080 60Hz 1920 x 1080 50Hz 3840 x 2160 30Hz 3840 x 2160 25Hz 4096 x 2160 30Hz 4096 x 2160 25Hz
	Set the frame rate and display resolution of your Sequoia UHD's display. Upon selecting a different frame rate or display resolution, a confirmation message will appear. Click **Yes** to confirm.
Keep aspect ratio	Confine each window to a fixed width-to-height ratio; a resized window will also follow this aspect ratio. By default, the aspect ratio of a window is set to match that of its corresponding video source. **On** – default.
Flip	Rotates the display 180-degrees. **Off** – default.
Display mode	On Off Display mode background color
	Seamless switching of preset layout when using the ↑ and ↓ hot-keys in Host operation mode by hiding all window's label and signal format as well as switching to the display mode background (next item). (**Off** – default)
Display mode background color	Basic colors: ... Custom colors: ... Add to Custom Colors Hue: 163 Red: 26 Sat: 160 Green: 19 Val: 55 Blue: 98 OK Cancel
	Change the background color when above item **Display mode** is set **On** by performing the following: (default – RGB (32,32,32)) *Step 1. In **Basic colors** on the upper left portion of the pop-up window, click to select a desired color.* *Step 2. Adjust the **Hue, Sat**uration, and brightness **Val**ues.* *Step 3. Adjust the **Red, Green**, and **Blue** values.* *Step 4. Add the adjusted color to **Custom colors** by clicking the **Add to Custom Colors** button (or directly drag a color from **Basic colors** to **Custom colors** if no adjustment is needed).* *Step 5. Repeat steps 1–4 for any additional color. Click to select a*

*desired color from **Custom colors** to be the background color.*

Label	Display label ▶ Display IP UMD ▶ Define label ▶ Label outside video ▶ Blending ▶ Label auto-hide ▶ Display label when full screen ▶

Display label	Display/hide the label of a selected/all window(s). **On** – default.

Display IP UMD	Display/hide the under monitor display (UMD) of a selected/all window(s) paired TX name. The **IP UMD** is shown beside the window's label (previous item) separated by the "**/**" symbol.

Define label	Define label Font size Font color Background color Define label: Image 1 OK Cancel **Define label**: input a text string that will appear as the label of the selected window (up to 31 characters). *Note: This user manual refers to the four windows based on their default labels: **Image 1**, **Image 2**, **Image 3** and **Image 4** windows.* Font size: 20 OK Cancel **Font size**: set the font size for a label's text (**14** to **60**). **20** pixels – default Basic colors: Custom colors: Add to Custom Colors Hue: 163 Red: 26 Sat: 160 Green: 19 Val: 55 Blue: 98 OK Cancel **Font** (default is RGB (229,229,229)) and **Background color** (default is RGB (38,38,44)): change a label font's / background color by performing the following: *Step 1. In **Basic colors** on the upper left portion of the pop-up window, click to select a desired color.* *Step 2. Adjust the **Hue**, **Sat**uration, and brightness **Val**ues.* *Step 3. Adjust the **Red**, **Green**, and **Blue** values.* *Step 4. Add the adjusted color to **Custom colors** by clicking the **Add to***
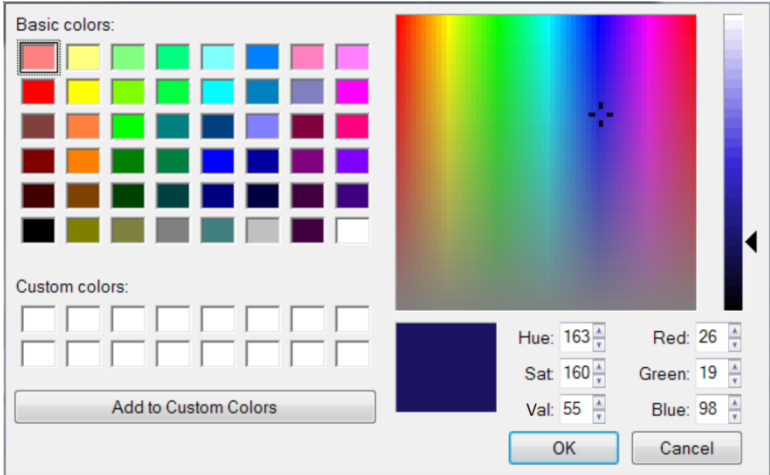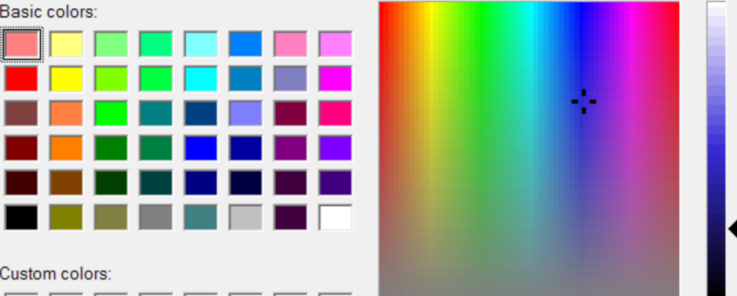
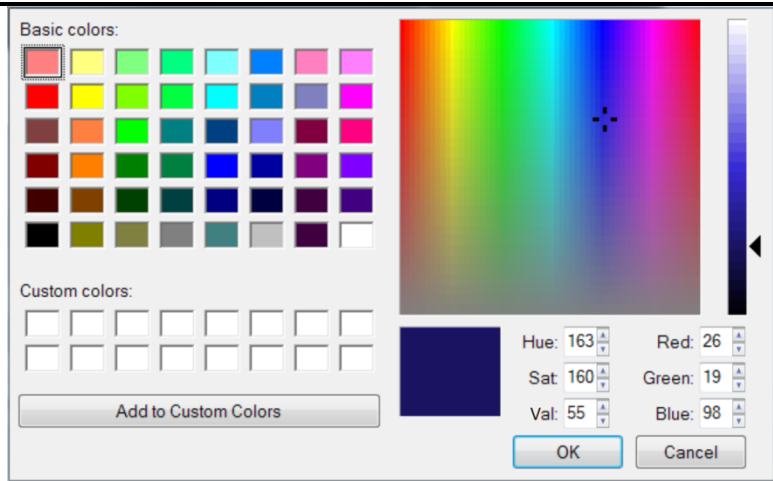|	
	Custom Colors button (or directly drag a color from *Basic colors* to *Custom colors* if no adjustment is needed). Step 5. *Repeat steps 1–4 for any additional color. Click to select a desired color from Custom colors to be the label color.*
Label outside video	<u>Note</u>: *This item is not shown by default. It is only available when the succeeding item Label auto-hide is turned Off.* (**On** – default) When this item is turned **On** and previous item **Keep aspect ratio** is **On** (default), then Image window will shrink to accommodate the label bar. This means that if the quad layout formerly fills up the whole monitor screen, then the Image window with **Label outside video** set **On** will show the background image on both its left/right.
Blending	On Off All on All off Blending level Enable a window's label to become transparent and blend into the image displayed on the window (**Off** – default). Transparency level (**0 ~ 7** where **7** is highest transparency level) can be set by using the arrow buttons on the **Blending level** pop-up window (**4** – default). Blending level: 4 Apply to all windows OK Cancel <u>Note</u>: *The previous item's Display label must be On.*
Label auto-hide	Enable display of label for approximately five seconds on a window that mouse cursor has just entered. Will also display the label of the window for approximately five seconds upon switching from <u>Remote</u> mode to <u>Host</u> mode. **On** – default
Display label when full screen	Enable the four windows to display their labels when set to full screen (only effective when **Display label** is set **All on**). **Off** – default
Border	Border color Border width
Border color	Basic colors: Custom colors: Add to Custom Colors Hue: 163 Red: 26 Sat: 160 Green: 19 Val: 55 Blue: 98 OK Cancel Apply to all windows Change the border color of a selected window by performing the following: Step 1. *In **Basic colors** on the upper left portion of the pop-up window, click to select a desired color. Default – RGB (77,81,89)*

*Step 2. Adjust the **Hue**, **Sat**uration, and brightness **Val**ues.*
*Step 3. Adjust the **Red**, **Green**, and **Blue** values.*
*Step 4. Add the adjusted color to **Custom colors** by clicking the **Add to Custom Colors** button (or directly drag a color from **Basic colors** to **Custom colors** if no adjustment is needed).*
*Step 5. Repeat steps 1–4 for any additional color. Click to select a desired color from **Custom colors** to be the border color.*
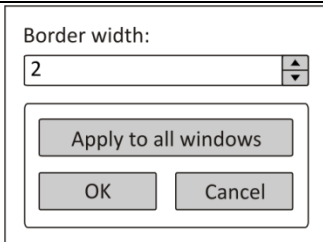
Border width	 Border width: **2** ▲▼ [Apply to all windows] [OK] [Cancel] Set the border width of a selected window (**0**, **2**, **4** and **6**). **On** – default **2** pixels
Active window border	Display active window border ▶ Active window border color ▶ *Note: This item may not be available when SUHD-2HD is installed instead of SUHD-KM.*
Display active window border	Enable the active window ("Surfer" or "Normal" (non-Surfer) mode) to have a different border color (**On** – default 2 pixels). *Note: This item may not be available when SUHD-2HD is installed instead of SUHD-KM.*
Active window border color (Surfer mode) / (Normal mode)	Basic colors: / Custom colors: [Add to Custom Colors] Hue: 163 Sat: 160 Val: 55 Red: 26 Green: 19 Blue: 98 [OK] [Cancel] Set the border color of the active window in "Surfer" or "Normal" (non-Surfer) mode by performing the following: *Step 1. In **Basic colors** on the upper left portion of the pop-up window, click to select a desired color.* *Step 2. Adjust the **Hue**, **Sat**uration, and brightness **Val**ues.* *Step 3. Adjust the **Red**, **Green**, and **Blue** values.* *Step 4. Add the adjusted color to **Custom colors** by clicking the **Add to Custom Colors** button (or directly drag a color from **Basic colors** to **Custom colors** if no adjustment is needed).* *Step 5. Repeat steps 1–4 for any additional color. Click to select a desired color from **Custom colors** to be the border color.* *Surfer mode: default – RGB (255,255,0)* *Normal mode: default – RGB (255,0,0)* *Note: This item may not be available when SUHD-2HD is installed instead of SUHD-KM.*
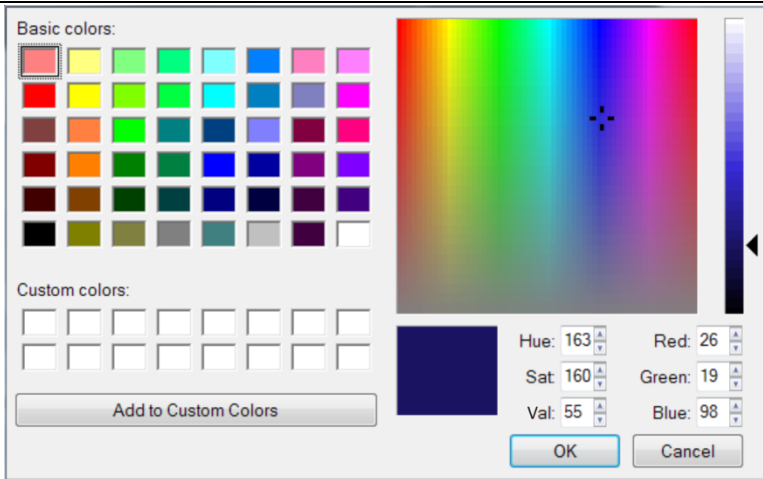
Video alarm	Enable video loss and HDCP not supported detection by displaying an alert message(s) on any window that fails to receive video signal(s) or input signal with HDCP content not supported by monitor. **On** – default ⚠ N.V. ⚠ HDCP Font color: RGB (229,229,229) RGB (229,229,229) Background color: RGB (191,25,25) RGB (31,157,229)
Display signal format	Display signal format ▶ Signal format auto-hide ▶ Blending ▶
Display signal format	Display/Hide resolutions and frame rates of the video inputs currently selected on the four windows. **On** – default Font color: RGB (229,229,229) Background color: RGB (191,25,25)
Signal format auto-hide	Enable display of resolution and frame rate of the video input for approximately five seconds on a window that mouse cursor has just entered. When in full screen mode, display of resolution and frame rate of the video input will occur upon moving mouse cursor to the upper left portion (location of signal format) and will disappear once mouse cursor has moved away. If mouse cursor stays in that position it will display for approximately five seconds only. Will also display resolutions and frame rates of the video inputs for approximately five seconds upon switching from <u>Remote</u> mode to <u>Host</u> mode. **On** – default
Blending	On Off All on All off Blending level Enable a signal format's label to become transparent and blend into the image displayed on the window (**Off** – default). Transparency level (**0 ~ 7** where **7** is the highest transparency level) can be set by adjusting the arrow buttons on the **Blending level** pop-up window (**4** – default). Blending level: 4 Apply to all windows OK Cancel <u>Note</u>: The previous item **Display Signal Format** must be **On**.
Tally	HDMI tally color ▶ Headphone tally color ▶
HDMI tally color	Turn on HDMI with audio Turn off HDMI with audio

Set the left tally color when embedded audio output in HDMI signal is turned on/off by performing the following:

*Step 1. In **Basic colors** on the upper left portion of the pop-up window, click to select a desired color.*

*Step 2. Adjust the **Hue**, **Sat**uration, and brightness **Val**ues.*

*Step 3. Adjust the **Red**, **Green**, and **Blue** values.*

*Step 4. Add the adjusted color to **Custom colors** by clicking the **Add to Custom Colors** button (or directly drag a color from **Basic colors** to **Custom colors** if no adjustment is needed).*

*Step 5. Repeat steps 1–4 for any additional color. Click to select a desired color from **Custom colors** to be the border color.*

ON: default – RGB (0,255,0)

OFF: default – RGB (255,0,0)

	Turn on headphone audio
	Turn off headphone audio
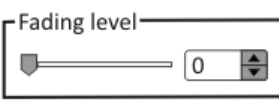
Headphone tally color
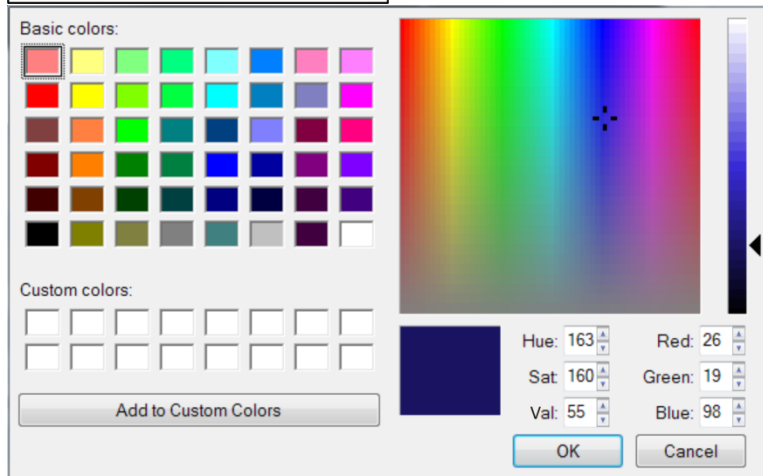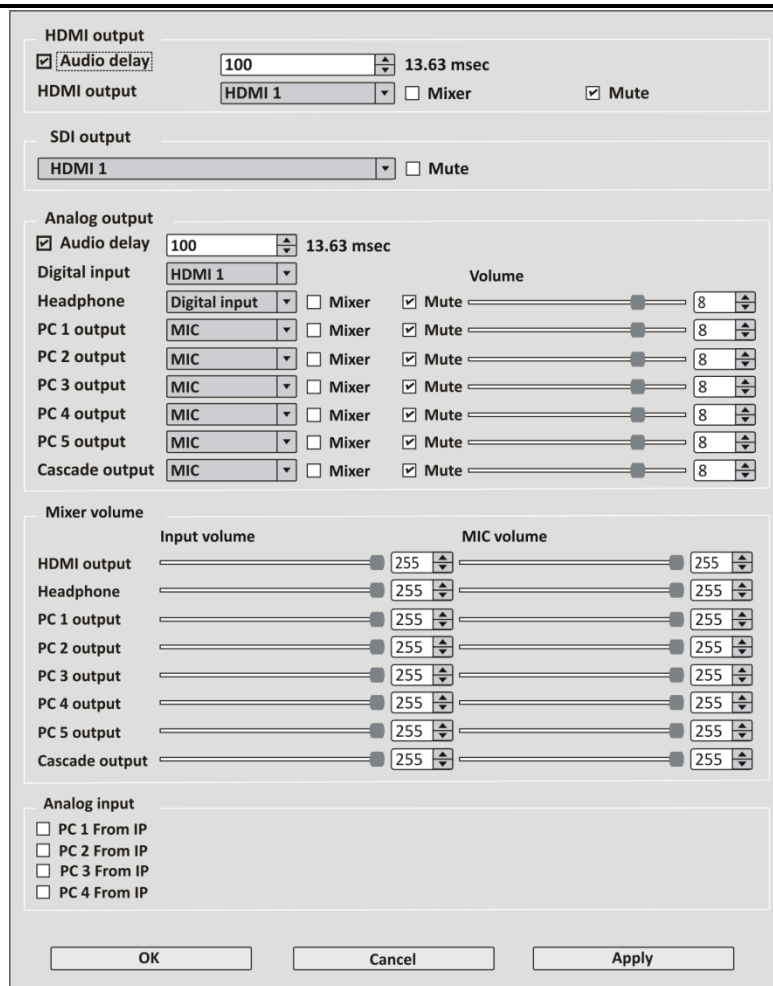
Set the right tally color when audio output from headphone is turned on/off by performing the following:

*Step 1. In **Basic colors** on the upper left portion of the pop-up window, click to select a desired color.*

*Step 2. Adjust the **Hue**, **Sat**uration, and brightness **Val**ues.*

*Step 3. Adjust the **Red**, **Green**, and **Blue** values.*

*Step 4. Add the adjusted color to **Custom colors** by clicking the **Add to Custom Colors** button (or directly drag a color from **Basic colors** to **Custom colors** if no adjustment is needed).*

*Step 5. Repeat steps 1–4 for any additional color. Click to select a desired color from **Custom colors** to be the border color.*

ON: default – RGB (0,255,0)

OFF: default – RGB (255,0,0)

Full screen control	Automatically enter Remote mode ▶ Apply previous layout upon leaving Remote mode ▶ *Note: This item may not be available when SUHD-2HD is installed instead of SUHD-KM.*
Automatically enter Remote mode	Enable a particular window in multi-display to enter <u>Remote</u> operation mode upon using any of the below methods to switch to full screen view: ✓ **Ctrl** + **F#** (**F1** to **F4**) hot-keys, or ✓ Click the 🔳 icon (top-right corner of window) *<u>Note</u>: This item may not be available when SUHD-2HD is installed instead of SUHD-KM.*
Apply previous layout upon leaving Remote mode	Enable a particular window to apply the prior to switching to full screen view's multi-display layout when using any of the below methods to return to <u>Host</u> operation mode from <u>Remote</u> operation mode: ✓ **Pause/Break** hot-key or **control** + **option (Alt)** + **shift** + **p** ✓ Double-click the mouse scroll button *<u>Note</u>: This item may not be available when SUHD-2HD is installed instead of SUHD-KM.*
Fading level	┌─Fading level──────┐ │ 🔲━━━━━━━━ 0 ▲▼ │ │ │ │ ┌──OK──┐ ┌─Cancel─┐│ └────────────────────┘ Set the speed when an image window that is partly hidden from view is selected to appear on the topmost level for seamless effect (one image slowly fades from view while another takes its place). Use the slider (**0~10** levels) where **0** is for instant switching while **10** corresponds to the slowest fading speed. *<u>Note</u>: This option is not applicable for full screen window switching.*

HDMI output
☑ Audio delay   100   ⬍   13.63 msec
HDMI output   HDMI 1 ▾   ☐ Mixer   ☑ Mute

SDI output
HDMI 1   ▾   ☐ Mute

Analog output
☑ Audio delay   100   ⬍   13.63 msec

				Volume		
Digital input	HDMI 1	▾				
Headphone	Digital input	▾	☐ Mixer	☑ Mute ━━━━■━	8	⬍
PC 1 output	MIC	▾	☐ Mixer	☑ Mute ━━━━■━	8	⬍
PC 2 output	MIC	▾	☐ Mixer	☑ Mute ━━━━■━	8	⬍
PC 3 output	MIC	▾	☐ Mixer	☑ Mute ━━━━■━	8	⬍
PC 4 output	MIC	▾	☐ Mixer	☑ Mute ━━━━■━	8	⬍
PC 5 output	MIC	▾	☐ Mixer	☑ Mute ━━━━■━	8	⬍
Cascade output	MIC	▾	☐ Mixer	☑ Mute ━━━━■━	8	⬍

Mixer volume

	Input volume		MIC volume	
HDMI output	━━━━━■	255 ⬍	━━━━━■	255 ⬍
Headphone	━━━━━■	255 ⬍	━━━━━■	255 ⬍
PC 1 output	━━━━━■	255 ⬍	━━━━━■	255 ⬍
PC 2 output	━━━━━■	255 ⬍	━━━━━■	255 ⬍
PC 3 output	━━━━━■	255 ⬍	━━━━━■	255 ⬍
PC 4 output	━━━━━■	255 ⬍	━━━━━■	255 ⬍
PC 5 output	━━━━━■	255 ⬍	━━━━━■	255 ⬍
Cascade output	━━━━━■	255 ⬍	━━━━━■	255 ⬍

Analog input
☐ PC 1 From IP
☐ PC 2 From IP
☐ PC 3 From IP
☐ PC 4 From IP

[OK]   [Cancel]   [Apply]

Audio routing

Note: This item may not be available when SUHD-2HD is installed instead of SUHD-KM.

Set the Sequoia UHD audio-related parameters as well as audio signal source routing to the audio ports:

HDMI output
Audio delay (default is enabled) range: **100** (13.63 milliseconds – default) ~ **8191** (687.86 milliseconds). Click **Apply** after adjustment.
Volume control for HDMI output is via the monitor display.

HDMI output allows you to select from the following audio input signal sources that will output to the rear panel's **HDMI OUT** port:
❖ **HDMI 1** (corresponds to the HDMI embedded audio signal entering the rear panel's **HDMI IN 1** port)
❖ **HDMI 2** (corresponds to the HDMI embedded audio signal entering the rear panel's **HDMI IN 2** port)
❖ **HDMI 3** (corresponds to the HDMI embedded audio signal entering the rear panel's **HDMI IN 3** port)
❖ **HDMI 4** (corresponds to the HDMI embedded audio signal entering the rear panel's **HDMI IN 4** port)
❖ **SDI cascade** (corresponds to the rear panel's **CASCADE IN** BNC port)
❖ **PC 1** (corresponds to the audio signal entering via the rear panel's 🎤🎧 **1** port)
❖ **PC 2** (corresponds to the audio signal entering via the rear panel's 🎤🎧 **2** port)
❖ **PC 3** (corresponds to the audio signal entering via the rear panel's 🎤🎧 **3** port)
❖ **PC 4** (corresponds to the audio signal entering via the rear panel's 🎤🎧 **4** port)
❖ **PC 5** (corresponds to the audio signal entering via the rear panel's

⬤ 🎤 **IN** port)

❖ **Cascade** (corresponds to the rear panel's **CASCADE IN** BNC port)
❖ **MIC** (corresponds to the audio signal entering via the rear panel's
🎤 port

Then click **Apply** for the selection to take effect.

The **Mixer** option allows you to have dual audio output. To achieve this,
make sure to connect a microphone to the rear panel's 🎤 port.
For example, if you wish to have a personal commentary of the video
output (with audio) being played in **PC 1**, just click the **Mixer** checkbox
and click **Apply** to enable simultaneous broadcast of embedded audio as
well as your own voice added to the mix. The ratio of the dual sound
volume is 50-50.
*Note: **Mixer** is unavailable for **HDMI 1 ~ HDMI 4** and **SDI cascade**.*

Mute and then clicking **Apply** allows for instant volume suppression.

*Note: The next item is applicable for Sequoia UHD+ / UHD/T+ only (for
cascade purposes).*
SDI output allows you to select from the following audio input signal
sources that will output to the rear panel's **CASCADE OUT** port:
❖ **HDMI 1** (corresponds to the HDMI embedded audio signal entering the
rear panel's **HDMI IN 1** port)
❖ **HDMI 2** (corresponds to the HDMI embedded audio signal entering the
rear panel's **HDMI IN 2** port)
❖ **HDMI 3** (corresponds to the HDMI embedded audio signal entering the
rear panel's **HDMI IN 3** port)
❖ **HDMI 4** (corresponds to the HDMI embedded audio signal entering the
rear panel's **HDMI IN 4** port)
❖ **SDI cascade** (corresponds to the rear panel's **CASCADE IN** BNC
port)
Then click **Apply** for the selection to take effect.

Mute and then clicking **Apply** allows for instant volume suppression.

Analog output
Audio delay (default is enabled) range: **100** (13.63 milliseconds – default)
~ **8191** (687.86 milliseconds). Click **Apply** after adjustment.
*Note: **Audio delay** is only available for **Headphone**.*

Digital input allows you to select from the following audio input signal:
❖ **HDMI 1** (corresponds to the HDMI embedded audio signal entering the
rear panel's **HDMI IN 1** port)
❖ **HDMI 2** (corresponds to the HDMI embedded audio signal entering the
rear panel's **HDMI IN 2** port)
❖ **HDMI 3** (corresponds to the HDMI embedded audio signal entering the
rear panel's **HDMI IN 3** port)
❖ **HDMI 4** (corresponds to the HDMI embedded audio signal entering the
rear panel's **HDMI IN 4** port)
❖ **SDI cascade** (corresponds to the rear panel's **CASCADE IN** BNC
port)
Then click **Apply** for the selection to take effect.

Headphone (corresponds to the rear panel's ⬤ port)
PC 1 / **PC 2** / **PC 3** / **PC 4** / **PC 5 output** (corresponds to the rear panel's
🎤⬤ **1** / **2** / **3** / **4** / ⬤🎤 **IN** ports respectively)
Cascade output (corresponds to the rear panel's **CASCADE OUT** BNC
port)
The following are the available audio input signal sources for the above
items (**Headphone** / **PC 1** / **PC 2** / **PC 3** / **PC 4** / **PC 5 output** and
Cascade output):
❖ **Digital input** – this will correspond to your choice of **HDMI 1 ~ HDMI 4**
or **SDI cascade** in the above item **Digital input**.
❖ **PC 1** (corresponds to the audio signal entering via the rear panel's
🎤⬤ **1** port)

❖ **PC 2** (corresponds to the audio signal entering via the rear panel's 🎤🎧 **2** port)

❖ **PC 3** (corresponds to the audio signal entering via the rear panel's 🎤🎧 **3** port)

❖ **PC 4** (corresponds to the audio signal entering via the rear panel's 🎤🎧 **4** port)

❖ **PC 5** (corresponds to the audio signal entering via the rear panel's 🎧🎤 **IN** port)

❖ **Cascade** (corresponds to the rear panel's **CASCADE IN** BNC port)

❖ **MIC** (corresponds to the audio signal entering via the rear panel's 🎤 port)

Then click **Apply** for the selection to take effect.

For each of the above analog output ports, set the desired **Volume** level (**0** weakest ~ **10** loudest) or **Mute** it (for instant volume suppression). Click **Apply** for any changes to take effect.

The **Mixer** option allows you to have dual audio output. To achieve this, make sure to connect a microphone to the rear panel's 🎤 port.

For example, if you wish to have a personal commentary of the video output (with audio) being played in **PC 1**, just click the **Mixer** checkbox to enable simultaneous broadcast of embedded audio as well as your own voice added to the mix.

Click **Apply** for any changes to **Volume**, **Mixer** and **Mute** to take effect.

Mixer volume
For each of the above digital and analog output ports that have the **Mixer** option enabled, set the volume level (**0** weakest ~ **255** loudest) of the embedded audio as well as set the volume level (**0** weakest ~ **255** loudest) of the microphone audio.

Then click **Apply** for any changes to take effect.
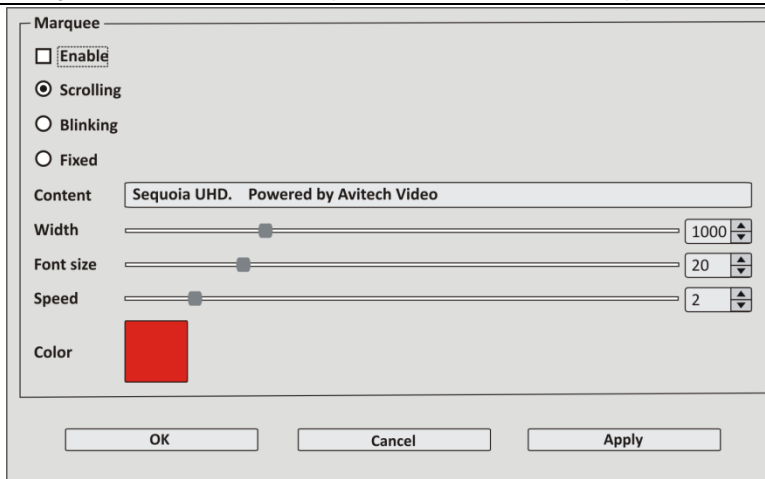
Analog input
When enabled, allows you to switch input source of **Headphone** from the default **SUHD-KM** card's 🎤🎧 **1**/**2**/**3**/**4** ports to the audio signal entering the **SUHD-IP** card's **KVMoIP** ports of **Video 1**/**2**/**3**/**4**.
Click **Apply** for the selection to take effect.

Note: Clicking OK will make any adjustments done above take effect and allows you to exit audio setup. While clicking Cancel will nullify any changes done even if the Apply button has been previously pressed.

Marquee

Marquee	
☐ Enable	
⦿ Scrolling	
○ Blinking	
○ Fixed	
Content	Sequoia UHD. Powered by Avitech Video
Width	1000
Font size	20
Speed	2
Color	

| OK | Cancel | Apply |

Click **Enable** to turn on scrolling text. The default position is on the upper left area of the monitor display. To change position, use the mouse to click and drag the marquee to a new position.
Note: Enabling the next item Window drag/resize preview frame (On) would greatly assist you when changing the position of marquee.

Click to select the type of marquee: **Scrolling** (travels from left to right) or **Blinking** (intermittent) or **Fixed** (stationary).

Enter text to appear onscreen in the **Content** field, 60 characters maximum (special characters other than letters and numerals allowed).

Width: **100** ~ **3840** (default is **1000** pixels)
Note:
1. *Since the setting of x,y coordinates for Sequoia UHD is designed towards a 4K display, this also includes the positioning for marquee. The values (**100** ~ **3840**) for setting the **Width** will not change for a 1920×1080 resolution. This means that if you wish the marquee to travel the whole width of your 1920 pixel display, then you must set it at **3840**. Otherwise, if you set it at **1920** then marquee travel will only be one-half of your 1920 pixel display.*
2. *If you wish the marquee text to be centered on the monitor display, do not set the size at **3840** because this would cause the marquee to occupy the maximum width of the 4K display.*

Font size: **10** ~ **60** (default is **20**)

Speed: **1** ~ **10** (default is **2**)

Color
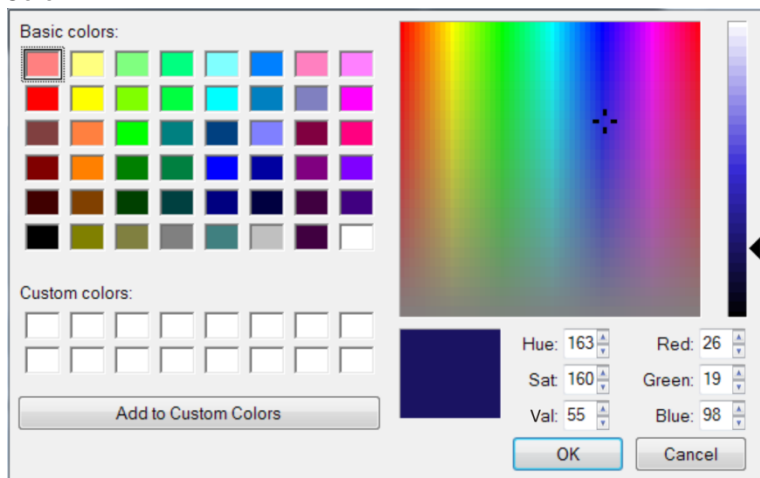
Change the text color by clicking the color box and performing the following: (default – RGB (255,0,0))
*Step 1. In **Basic colors** on the upper left portion of the pop-up window, click to select a desired color.*
*Step 2. Adjust the **Hue**, **Sat**uration, and brightness **Val**ues.*
*Step 3. Adjust the **Red**, **Green**, and **Blue** values.*
*Step 4. Add the adjusted color to **Custom colors** by clicking the **Add to Custom Colors** button (or directly drag a color from **Basic colors** to **Custom colors** if no adjustment is needed).*
Step 5. Repeat steps 1–4 for any additional color.
*Step 6. Click to select a desired color from **Custom colors** to be the text color. Then click **OK**.*
On the **Marquee** window, click **Apply** to apply the settings and then click **OK** to exit.
Note:
1. *The marquee function is normally used in <u>Display</u> mode (OSD turned off). But when using marquee in non-<u>Display</u> mode, avoid positioning marquee near the upper right portion of Image window as you would be unable to access the pop-up selections. Or, try using **Font size** lower than **30**.*
2. *During **Audio routing** setup (previous item), marquee will temporarily disappear from screen, but will reappear upon exiting **Audio routing** setup.*
3. *During Image window resize/reposition, marquee will temporarily disappear from screen, but will reappear upon finishing Image window*
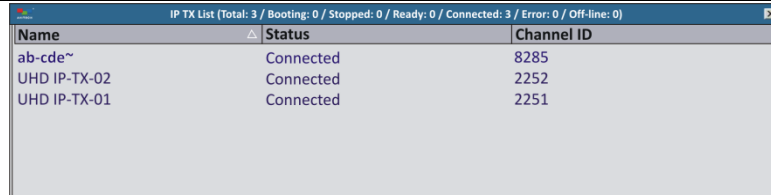
resize/reposition.
4. *It is not possible to position marquee on the lowest portion of the Image window reserved for the auto-hide menu. System will automatically set it above the auto-hide menu's position.*
5. *During <u>Remote</u> operation mode, marquee will temporarily disappear from screen, but will reappear upon returning to <u>Host</u> operation mode.*

| **Window drag/resize preview frame** | By default, when repositioning (Image window and marquee) or resizing (Image window), the exact location cannot be ascertained until after letting go of the left mouse button. With **Window drag/resize preview frame** turned **On**, the Image window's and marquee's outer frame would appear onscreen to serve as a guide. |

Show IP TX/RX list

Displays the **IP TX List** table (default position – lower left) showing all the **TX** (transmitters); as well as displaying the **IP RX List** table (default position – lower right) showing all the **RX** (receivers) detected by your Sequoia UHD through the **SUHD-IP** as well as via the gigabit IGMP switch connected to the **IP** port of **SUHD-MB** or **SUHD-MB/IP**.

Aside from the **Name**, **Status** and **Channel ID** columns, additional columns showing the **IP** address, **MAC** (Media Access Control address) and **FW version** can also be displayed by right-clicking anywhere on the heading area and clicking the item(s) you want displayed.
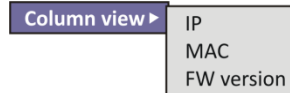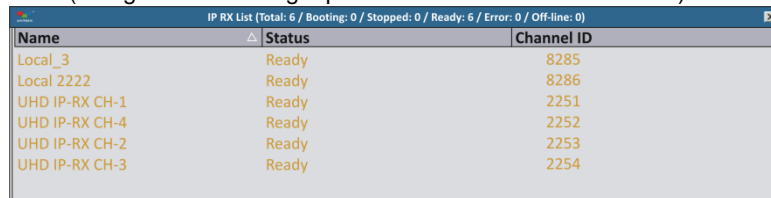
To hide either or both **IP TX List** and **IP RX List** tables, click the ☒ (upper right) of each window, or press **Ctrl**, **Ctrl**, **M** hotkey. To show both tables again, click this item **Show IP TX/RX list** in the "right-click" menu, or press **Ctrl**, **Ctrl**, **M** hotkey.

You can use the mouse to click-and-drag the **IP TX List** table and **IP RX List** table to a new position or change its size by dragging on the corners. To return both tables to its default size and position just click the **Home** button.

You can also change the order of TX/RX appearing in the list by clicking the title bar of each column to toggle between ascending/descending order (triangle outline on right portion of each cell in the title bar).

To assign TX and RX pairing, the following methods can be used:
1. Use the mouse to drag a TX on top of an RX. **Channel ID** value for RX will then follow the **Channel ID** value of TX. Or,
2. Click to highlight (select) a TX, then press **Ctrl** + **C** hotkey, then click to highlight (select) a RX, then press **Ctrl** + **V** hotkey. To assign a TX to multiple RXs, press **Ctrl** prior to clicking each RX and then press **Ctrl** + **V** hotkey. **Channel ID** value for multiple RXs will then follow the **Channel ID** value of TX. Or,
3. Right-click a TX and click **Set TX channel** in the menu. Copy the RX **Channel ID** value that you wish to assign pairing.

Right-click menu for **IP TX List**:

Name		Channel ID
ab-cde~	Rename	8285
UHD IP-TX-02	Set TX channel	2252
UHD IP-TX-01	Set TX bitrate	2251
	Disconnect	
	Connect	
	Exclusive mode ▶	
	View only mode ▶	
	Audio select ▶	
	Firmware upgrade	
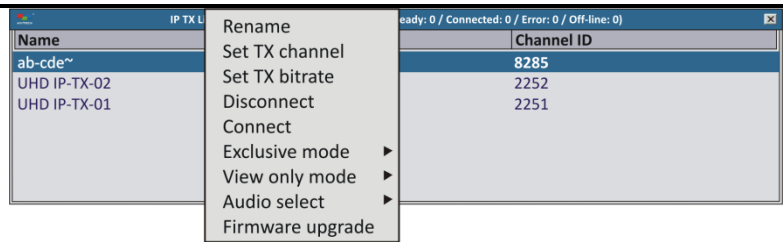
*Note: The option **Delete** will only appear when you right-click a TX that has an **Off-line Status**. Click **Delete** to remove a particular TX from the **IP TX List**. Another way is to press **Ctrl** on your keyboard and use the mouse to select a particular TX (continue selecting for multiple TXs), then press **Delete** on your keyboard. Or, if you wish to delete all the TX that has an **Off-line Status** from the **IP TX List**, press **Ctrl** + **A** and press **Delete** on your keyboard.*

Upon clicking **Rename**, the following window appears allowing you to change the name of a particular TX appearing in the **Name** column.

Define node name:

UHD IP-TX-02

[OK]   [Cancel]
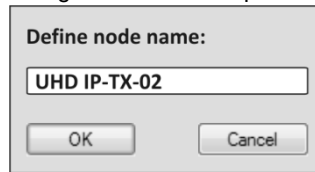
Upon clicking **Set TX channel**, the following window appears allowing you to change the channel number (**0** ~ **9999**) of a particular TX appearing in the **Channel ID** column. You can copy the **Channel ID** number of a particular RX to pair the TX to the RX.

TX channel

2252

[OK]   [Cancel]
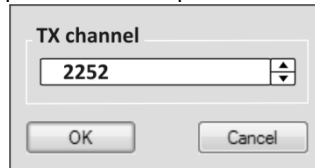
Upon clicking **Set TX bitrate**, the following window appears allowing you to set the video (with embedded audio) signal transfer rate from TX device to RX device via IGMP switch.

TX bitrate
● Auto
○ 200 M
○ 150 M
○ 100 M
○ 50 M
○ 10 M

[OK]   [Cancel]
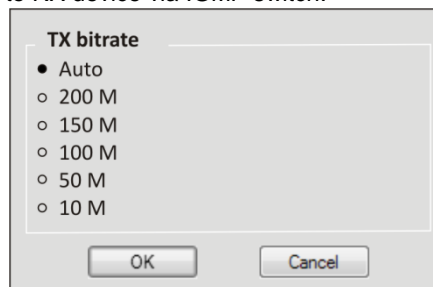
Click **Disconnect** to terminate connection between a TX and your Sequoia UHD. The **Status** column will change from **Connected** to **Stopped**.

Click **Connect** to resume connection between a TX and your Sequoia UHD.

The following **Status** for TX may be shown –
Ready = when a TX is not paired (assigned) to a RX.
Connected = when a TX is paired with a RX.
Booting = when the remote device connected to TX is currently restarting.
Stopped = upon right-clicking a TX and selecting **Disconnect**.
Off-line = upon disconnection of network cable between a TX and the gigabit IGMP switch or TX is powered-off.
Error = when this appears, try restarting the TX device and observe if it will change its status. If after restarting it still shows **Error**, contact your

Avitech dealer for assistance.

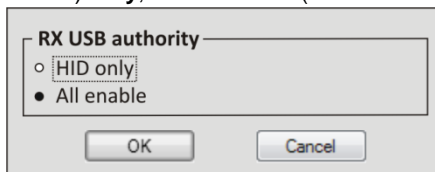Enabling **Exclusive mode** (default is **Off**) allows exclusive pairing (routing) between one TX and one RX. Any other RX(s) routed to the same TX would be suddenly disconnected upon enabling this option.
*Note: To complete setup of **Exclusive mode**, the corresponding RX must also enable **Exclusive mode** by right-clicking and turning it **On**.*
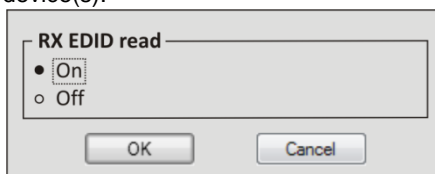
Enabling **View only mode** (default is **Off**) restricts access to the remote computer connected to the TX by allowing "view only" privilege (unable to enter Remote mode to control the computer).
*Note: To complete setup of **View only mode**, the corresponding RX must also enable **View only mode** by right-clicking and turning it **On**.*
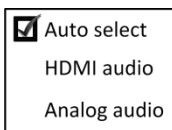
Clicking **Audio select** allows you to set the audio source to allow **HDMI** embedded **audio** source only, or **Analog audio** only, or **Auto**matic detection and **select** (default).

Clicking **Firmware upgrade** allows you to update the firmware of Pacific X-IPT / X-IPTR / X-IPt detected by the Sequoia UHD.

Right-click menu for **IP RX List**:
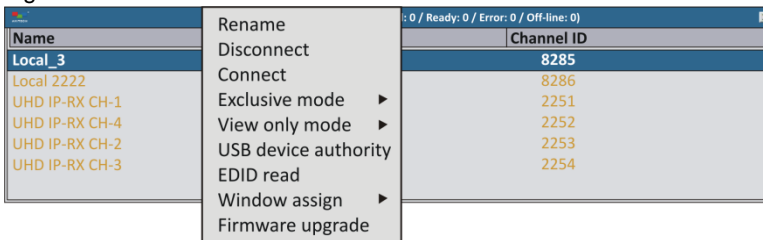
*Note: The option **Delete** will only appear when you right-click a RX that has an **Off-line Status**. Click **Delete** to remove a particular RX from the **IP RX List**. Another way is to press **Ctrl** on your keyboard and use the mouse to select a particular RX (continue selecting for multiple RXs), then press **Delete** on your keyboard. Or, if you wish to delete all the RX that has an **Off-line Status** from the **IP RX List**, press **Ctrl + A** and press **Delete** on your keyboard.*

Upon clicking **Rename**, the following window appears allowing you to change the name of a particular RX appearing in the **Name** column.
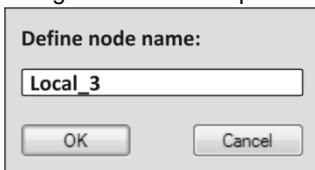
Click **Disconnect** to terminate connection between a TX and your Sequoia UHD or another RX. The **Status** column will change from **Connected** to **Stopped**.

Click **Connect** to resume connection between a TX and your Sequoia UHD or another RX.

The following **Status** for RX may be shown –
Ready = whether a RX is paired (assigned) to a TX or not.
Booting = when the RX is currently restarting.
Stopped = upon right-clicking a RX and selecting **Disconnect**.
Off-line = upon disconnection of network cable between a RX (Sequoia UHD **KVMoIP** port) and the gigabit IGMP switch.
Error = when this appears, try restarting the RX device and observe if it will change its status. If after restarting it still shows **Error**, contact your Avitech dealer for assistance.

Enabling **Exclusive mode** (default is **Off**) allows exclusive pairing

(routing) between one RX and one TX. Any other RX(s) routed to the same TX would be suddenly disconnected upon enabling this option.
*Note: To complete setup of **Exclusive mode**, the corresponding TX must also enable **Exclusive mode** by right-clicking and turning it **On**.*

Enabling **View only mode** (default is **Off**) restricts access to the remote computer connected to the TX by allowing "view only" privilege (unable to enter Remote mode to control the computer).
*Note: To complete setup of **View only mode**, the corresponding TX must also enable **View only mode** by right-clicking and turning it **On**.*

Click **USB device authority** to toggle between restricting use of RX type-A USB ports to connect to **HID** (human interface device keyboard/ mouse) **only**, or **All enable** (no restriction – default).

```
┌─ RX USB authority ──────────────┐
│  ○ HID only                     │
│  ● All enable                   │
│      ┌────────┐    ┌────────┐   │
│      │   OK   │    │ Cancel │   │
│      └────────┘    └────────┘   │
└─────────────────────────────────┘
```

Click **EDID Read** to toggle automatic detection of EDID from the display device(s).

```
┌─ RX EDID read ──────────────────┐
│  ● On                           │
│  ○ Off                          │
│      ┌────────┐    ┌────────┐   │
│      │   OK   │    │ Cancel │   │
│      └────────┘    └────────┘   │
└─────────────────────────────────┘
```

✓ On (default)

<u>Scenario 1</u>:
Upon switching a signal to a display device connected to RX, Sequoia UHD will detect the preferred EDID of that display device and update the information to the respective source (connected to TX). Source device will then configure its output based on obtained EDID.

<u>Scenario 2</u>:
When routing a signal to multiple display devices routed from the same TX, Sequoia UHD will assess the preferred EDID of each display device and update the information to the respective source (connected to TX). Source device will then configure its output based on the assessed EDID and output at the optimum format supported by all the displays.
Note: Upon changing the existing routes, Sequoia UHD will re-assess the EDID of each display device and update the information to the respective source (connected to TX).

✓ Off

The EDID of the connected display device (connected to RX) will no longer be detected. The source device (connected to TX) will configure its output based on the latest obtained EDID during which **RX EDID read** was on.

Window Assign works in conjunction with the right-click menu item **Label** > **Display IP UMD** (must be set **On** or **All on**). It allows you to assign the TX name to be displayed on each of the four windows corresponding to your Sequoia UHD's **SUHD-MB** or **SUHD-MB/IPT HDMI IN 1** / **2** / **3** / **4** ports routed from each of the two/four **SUHD-IP HDMI OUT** ports.

```
┌────────────────┐
│ ☑ Window 1     │
│   Window 2     │
│   Window 3     │
│   Window 4     │
└────────────────┘
```

*Note: Since each **SUHD-IP HDMI OUT** port can only be routed to one **SUHD-MB** or **SUHD-MB/IPT HDMI IN 1** / **2** / **3** / **4** port, then your choice of **Window 1** / **2** / **3** / **4** would be unique.*

Clicking **Firmware upgrade** allows you to update the firmware of Pacific X-IPTR / X-IPr / X-IPRW / X-IPRG detected by the Sequoia UHD.

Right-click Menu

Show IP salvo list	Displays the **Salvo List** window showing all the mapping of sources and destinations. See section 4.3 **Salvo** for details on using this feature.
IP card setup	Setup name Local channel 1 [Local CH-1] Local channel 2 [Local CH-2] Local channel 3 [Local CH-3] Local channel 4 [Local CH-4] [OK] [Cancel] Allows you to conveniently change all four names of your Sequoia UHD's **SUHD-IP** RX (receiver) appearing in the **Name** column. If you have only one **SUHD-IP** card installed, depending if it is installed in the left slot or in the right slot, then only **Local channel 1** / **2** or **Local channel 3** / **4** will be available for setup.
Video wall management	*Note: Please refer to chapter 5 for details on using this feature.*
File transfer	Set copy file via USB Terminate copy file *Note: This item may not be available when SUHD-2HD is installed instead of SUHD-KM.*
Set copy file via USB	Set copy file via USB: [PC 1 and PC 2 ▼] PC 1 and PC 2 PC 1 and PC 3 PC 1 and PC 4 PC 1 and PC 5 PC 2 and PC 3 PC 2 and PC 4 PC 2 and PC 5 PC 3 and PC 4 PC 3 and PC 5 PC 4 and PC 5 Firmware upgrade Select two USB ports corresponding to two connected computers as endpoints for file and folder transfer. The Go! Bridge Utility will only initiate when both of the selected ports are currently displayed on the two windows. Refer to Appendix A for details. *Note:* *1. Firmware upgrade is for manufacturer use only.* *2. This item may not be available when SUHD-2HD is installed instead of SUHD-KM.*
Terminate copy file	End the file/folder transfer. *Note: This item may not be available when SUHD-2HD is installed instead of SUHD-KM.*
System	Network Power / Fan / Thermal alarm Export to USB disk Language ▶ USB device path Mouse setup ▶ KM assign Reset factory defaults Read EDID from screen ▶ Firmware version

MAC address

`00:23:45:67:ab:cd`

Network

☐ DHCP

IP address `192.168.0.5`

Sub mask `255.255.255.0`

Gateway `192.168.0.254`

DNS 1 ` `

DNS 2 ` `

Host name

`Avitech-Sequoia-UHD`

SNMP server

☐ Enable

SNMP server address `192.168.0.9`

SNMP server port `162`

Syslog server

☐ Enable

Syslog server address `192.168.0.10`

| OK | Cancel |

Network

Select **Network** to set up the network connection. The factory default IP address is: 192.168.0.5. The **Network** settings must be manually entered. This would be required for a network that uses fixed IP addresses. Upon completing **Network** adjustment, locate **OK** on the bottom and click it. This will apply the network setting to Sequoia UHD.

*Note: The **MAC address** is a fixed address corresponding to the network interface chip in your Sequoia UHD. The **DHCP** check box (if toggled on) enables automatic assignment of an IP address to your Sequoia UHD; you can choose to manually input an address or use the factory-default one (192.168.0.5) for the **IP address**.*

*Note: The **IP address** must be changed for multiple Sequoia UHD setup. The **Subnet mask** sets the number of IP addresses available in your local area network; in other words, the number of remote computers supported for remote monitoring. Make sure to press **OK** when done setting them. Set the time server's web address by entering the **DNS 1** (preferred DNS) to connect. Also, set the time server's web address by entering the **DNS 2** (alternated DNS) to connect.*

SNMP is a protocol for collecting and organizing information about managed devices, in this case the Sequoia UHD. The **SNMP server** fields allow you to **Enable** it, specify the server's IP **address** and **port** (server pertains to the computer where operating information regarding Sequoia UHD will be sent). The server should have the necessary application installed to gather data using the SNMP protocol.

Aside from SNMP, **Syslog** is another system log management tool with its own logging server software to help the administrator filter and focus on operating information messages regarding Sequoia UHD. The **Syslog server** fields allow you to **Enable** it and specify the server's IP **address**.

Power / **Fan** / **Thermal alarm**	**Power alarm** ☐ **Enable** **Hide:** `1 minute` **Display:** `Always on` **Fan alarm** ☐ **Enable** **Hide:** `1 minute` **Display:** `Always on` **Thermal alarm** ☐ **Enable** **Hide:** `1 minute` **Display:** `Always on` **Temperature: 61°C (141.8°F)** [OK] [Cancel]

Set the display settings detail for the power/fan/temperature alerts: enable/disable display warning; time duration when the warning is hidden (**1 minute**, **5 minutes**, **10 minutes**, **30 minutes**, **1 hour**, **2 hours**, **6 hours**, **12 hours** and **24 hours**); and time duration when the warning remains onscreen (**10 seconds**, **20 seconds**, **30 seconds**, **1 minute**, **2 minutes**, **5 minutes**, **10 minutes**, **30 minutes**, **1 hour** and **always on**).

For the power alert monitor to work properly, make sure that your Sequoia UHD is connected to both power sources: 12 V DC / 9 A power adapter and AC 100~240 V wall outlet. The power alert warning is activated when either of the two power sources goes offline.

The fan alert warning is activated when any of the six cooling fan inside the Sequoia UHD is not working properly.

The thermal alert warning is activated when any of the FPGA chips inside the Sequoia UHD reaches a temperature of 86 ^{o}C or higher.

The operating temperature of the Sequoia UHD is also displayed (Celcius and Fahrenheit).

Export to USB disk

*Note: This item is not shown by default. It is only available when upon unplugging the keyboard connected to the **SUHD-MB** USB type-A port on the rear panel of the Sequoia UHD and inserting a USB thumb drive. And then clicking "Cancel" when the file selector window appears.*

Upon clicking this command, allows you to backup to a USB thumb drive (supports FAT32 and NTFS formats only) the presets that was previously stored using the **Layout preset** > **Save preset** > **Save to preset** and **Save to latest** commands. Or press **Ctrl + S** before inserting the USB thumb drive. The default **AT-Sequoia-4H-UHD-Backup.bin** file will be created and saved in the root directory of your USB thumb drive. If you wish to make a distinction between the backup file saved previously and a backup file to be saved in a later time, you can add for example "11102017" after the word "Backup" in the file name (i.e. AT-Sequoia-4H-UHD-Backup-11102017.bin).

*Important: DO NOT alter the file name **AT-Sequoia-4H-UHD-Backup** as this will cause the backup file to become unacceptable to the system. You are only allowed to add acceptable characters after "**Backup**".*

To load the backup BIN file to the Sequoia UHD, insert the USB thumb drive into the **SUHD-MB** USB type-A port on the rear panel of the Sequoia UHD. When the file selector window appears, locate and select the BIN file and click **Open**. A "warning" message will appear asking you if you really wish to proceed. Click "Cancel" to abort or "OK" to proceed. The progress of updating will be shown (progress bar). You will be prompted to reboot the Sequoia UHD to complete the whole process.

Language	☑ English 简体中文 Toggle between English (26 alphabets) and Simplified Chinese (Mandarin Pinyin) input methods and user interface.
USB device path	☐ USB device 1 to IP ☐ USB device 2 to IP ☐ USB device 3 to IP ☐ USB device 4 to IP OK Cancel When enabled, allows you to switch input source of USB K/M (keyboard/mouse) from the default **SUHD-KM** card's **USB IN 1/2/3/4** ports to the USB K/M signal entering the **SUHD-IP** card's **KVMoIP** ports of **Video 1/2/3/4**. *Note: This item may not be available when SUHD-2HD is installed instead of SUHD-KM.*
Mouse setup	☑ Primary Secondary Pointer speed Select **Primary** to make the left mouse button the one you use for primary functions such as selecting and dragging. Select **Secondary** to make the right mouse button the one you use for primary functions such as selecting and dragging. **Pointer speed** ━━━■━━━ 3 ▲▼ OK Cancel Select the mouse pointer speed: **0** (fastest) ~ **5** (slowest). Default is **3**.
KM assign	KM assign Window 1 USB IN 1 ▼ Window 2 USB IN 2 ▼ Window 3 USB IN 3 ▼ Window 4 USB IN 4 ▼ OK Cancel Allows you to bundle video signal with keyboard/mouse control so that a specific input port in **SUHD-MB** is routed through the corresponding USB port on the **SUHD-KM** (i.e. **HDMI IN 1**, **2**, **3**, **4** is bundled with **USB IN 1**, **2**, **3**, **4** respectively).
Reset factory defaults	Reset your Sequoia UHD's right-click menu settings to its factory-default state. Upon resetting your Sequoia UHD to its factory-default state, your previously saved presets stored in the Sequoia UHD's flash memory will be automatically removed; make sure to have your files saved externally before resetting the Sequoia UHD to the factory-default state.
Read EDID from screen	Toggle automatic detection of EDID from the display device. ✓ On (default) Upon switching a signal to a display device connected to **HDMI OUT** port of **SUHD-MB** / **SUHD-MB/IPT**, Sequoia UHD will detect the preferred EDID of that display device and update the information to its source. Source device will then configure its output based on obtained EDID. ✓ Off

	The EDID of the connected display device will no longer be detected and Sequoia UHD will output at 4K.
Firmware version	Firmware version: UHD -2018 03-13 Rev-0 Scaler -03.13.2018 Merge-03.15.2018 Audio -09.14.2017 OK Display information of the firmware version and associated chipset embedded in your Sequoia UHD.
Hot-key overview	Displays a table showing the available hot-keys that can be used during <u>Host</u> operation mode, <u>Remote</u> operation mode as well as for utilizing your Sequoia UHD on the fifth computer.

Table 4-1 Mouse Right-click Menu Description

4.2 Changing the Background Image

The Sequoia UHD allows you to set the background image of the preview area of the in-system GUI. A dark backdrop with the Avitech logo serves as the default background image. Select an image file that will serve as the background image (allowed file formats are: BMP/JPEG/JPG/PNG only; acceptable image resolution up to 4K).

The following steps show how to replace the background image:

Step 1. Save the image file to a USB thumb drive (supports FAT32 and NTFS formats only).

*Step 2. Detach the keyboard connected to the **SUHD-MB** USB type-A port on the rear panel of the Sequoia UHD.*

Step 3. Insert the thumb drive into the just vacant USB type-A port. The following sample screen will automatically appear.
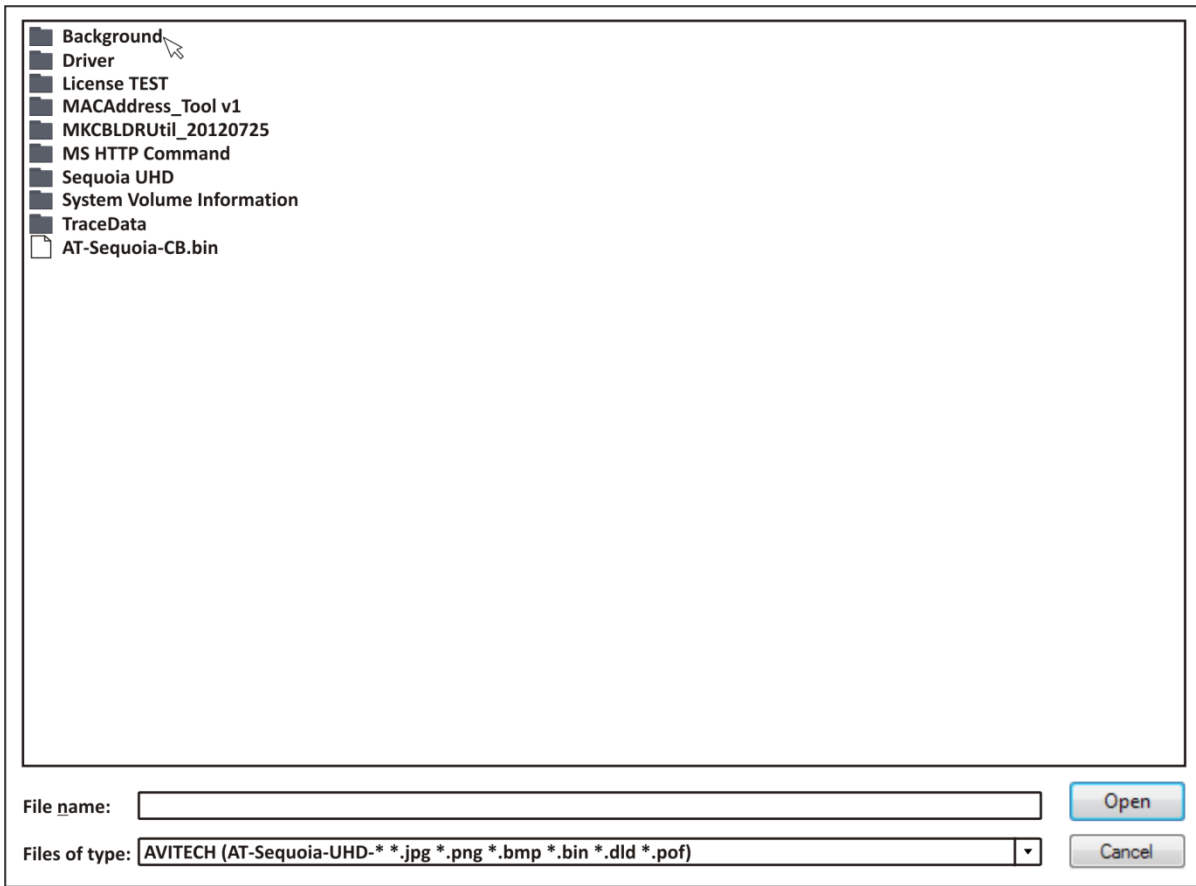
Figure 4-2 File Selector Window

Step 4. Navigate to the folder containing your image file.

Step 5. Select the image file.

Step 6. Click "Open".

Step 7. Click "OK" to confirm and the progress of updating will be shown (progress bar). The GUI's background will be updated.

4.3 Salvo

4.3.1 Configure a Salvo

A salvo is a mapping of sources and destinations. It is configured and saved in the Sequoia UHD and can be applied by a single "Trigger salvo" command. Each "salvo" stores a group of pre-defined routings. With a single command it reconfigures multiple routes for a number of sources and destinations all at once. Salvos can be saved and instantly recalled by clicking the corresponding **Salvo** button.

To edit a salvo, perform the following steps:

*Step 1. Press **Ctrl, Ctrl, S** on your keyboard or via the right-click menu's **Show IP Salvo list**; the **Salvo List** page will appear.*
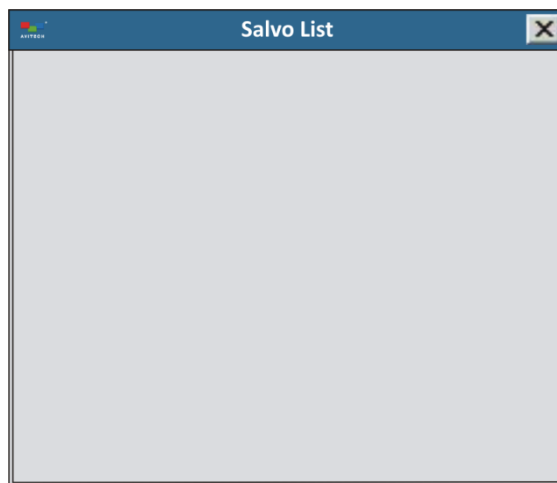
Figure 4-3 Salvo List Page

*Step 2. Right-click anywhere on the blank **Salvo List** page and click **Add salvo**.*
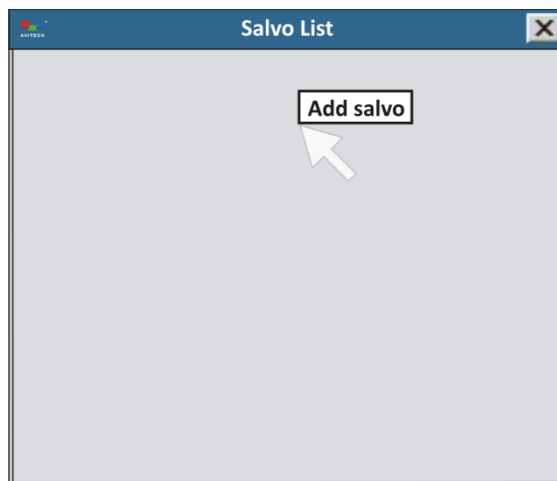
Figure 4-4 Creating a New Salvo

*Step 3. Assign a salvo name and click **OK**.*
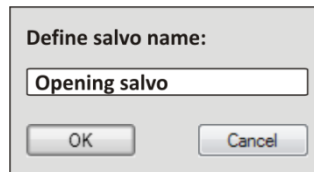
Figure 4-5 Define Salvo Name

Step 4. <u>Method 1: drag and drop method</u>
After designating the name of the salvo, next assign the routing. Drag a TX (i.e. TX_1) on top of the salvo name (i.e. Opening salvo). Then drag an RX (i.e. UHD IP-RX CH-1) on top of the TX. We can drag another RX (i.e. Local_3) on top of the same TX.

<u>Method 2: hot-keys method</u>
*Use the mouse to click the TX (i.e. TX_1) to select it (highlight). On your keyboard press **Ctrl + C**. Click the salvo name (i.e. Opening salvo). Then press **Ctrl + V**. Notice that TX_1 appears beneath "Opening salvo."*
*Click the RX (i.e. UHD IP-RX CH-1) to select it (highlight). On your keyboard press **Ctrl + C**. (To assign more than one RX to a TX, on your keyboard press **Ctrl**, then use the mouse to click another RX.) Click the TX (i.e. TX_1). Then press **Ctrl + V**. Notice that UHD IP-RX CH-1 appears beneath "Opening salvo."*
*Click another RX (i.e. Local_3) to select it (highlight). On your keyboard press **Ctrl + C**. Click the TX (i.e. TX_1). Then press **Ctrl + V**. Notice that Local_3 appears beneath "Opening salvo."*
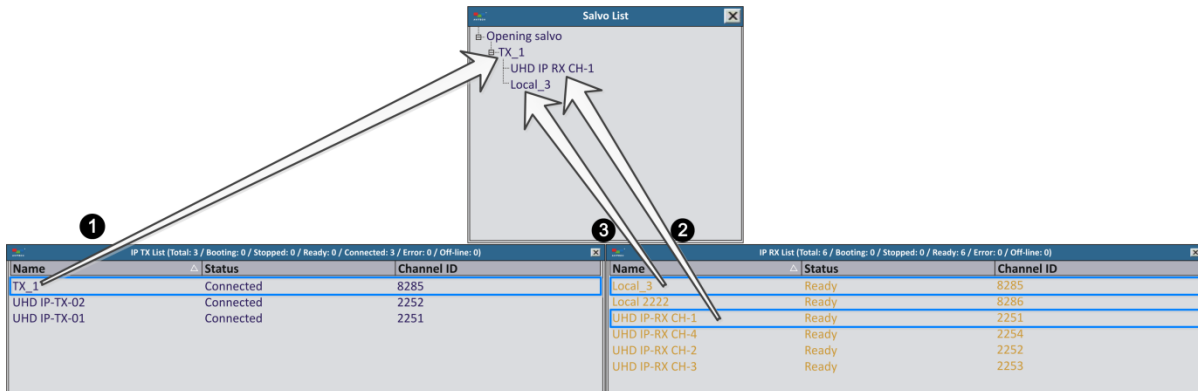
Figure 4-6 Assign Routing to a Salvo

*Step 5. After creating (a) salvo(s), right-click the selected salvo and click **Trigger salvo** to route a grouping of source and destination(s).*
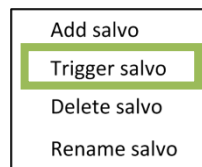
Figure 4-7 Trigger (Execute) a Salvo

*. You can also delete or rename the selected salvo by clicking **Delete salvo** or **Rename salvo** respectively.*

.   *You can also delete a specific TX or a specific RX from a salvo by right-clicking it and clicking*
         Delete TX *or* ***Delete RX*** *on the menu respectively. Then, click* ***OK*** *to confirm. Deleting a TX from*
         a salvo would remove the TX and the corresponding RX routed to it. While deleting a RX from a
         salvo would just remove that RX.

Add salvo	Add salvo
Delete TX	Delete RX

Figure 4-8 Delete a TX/RX From a Salvo

5. Video Wall Management

5.1 Basic Video Wall Management Setup

📄 *1. One Sequoia UHD – (SUHD-2HD card) can do 2×2 wall display (refer to the example in section 2.3.3 "Sequoia UHD to 2×2 Video Wall with Pacific X-IPT Connected via Gigabit IGMP Switch" for hardware connections).*

2. Two Sequoia UHDs – (two SUHD-2HD cards) can do 2×3 wall display (refer to the example in section 2.3.4 "Two Sequoia UHD to 2×3 Video Wall with Two Pacific X-IPT Connected via Gigabit IGMP Switch" for hardware connections).

Upon clicking **Video wall management**, the following page appears.
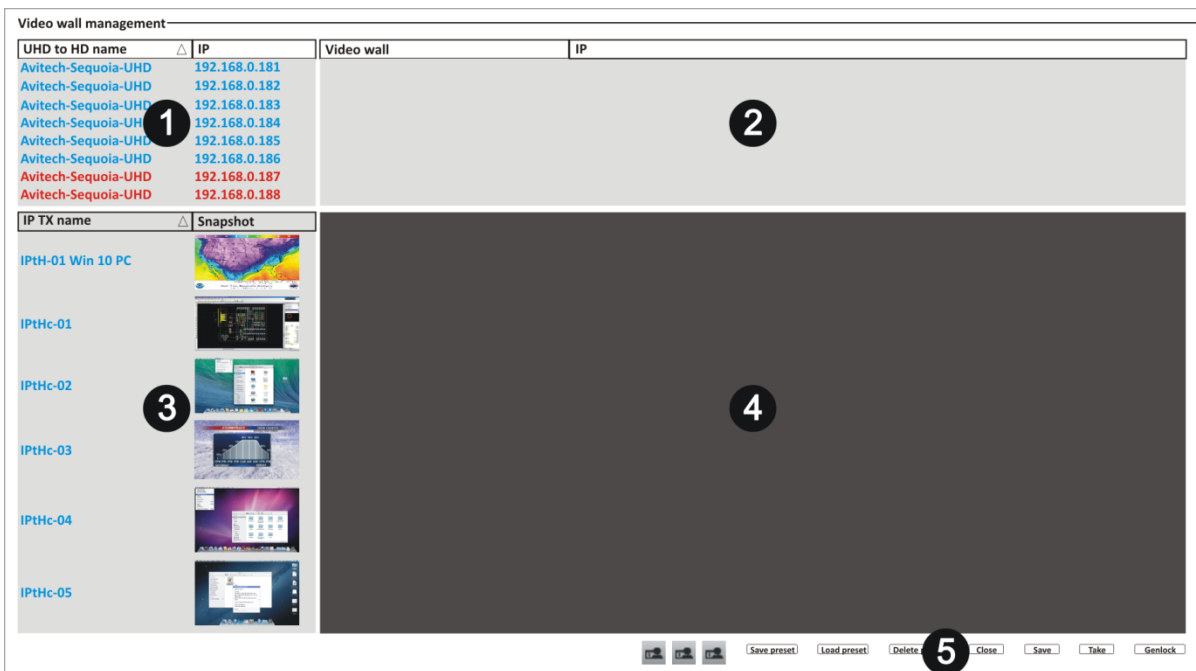
Figure 5-1 "Video Wall Management" Screen Components

❶ **Sequoia UHD list**	Shows the detected Sequoia UHD without SUHD-2HD card in blue text and showing the detected Sequoia UHD with SUHD-2HD card in red text (**name** and **IP address**).
❷ **Video wall connection diagram**	To create a video wall: *Step 1. Right-click here and then click **Add**.* *Step 2. Choose the type of video wall (configuration) and define the wall name.* *Step 3. Drag a detected SUHD-2HD card from the list when creating a 2×2 wall display. Or,* *Drag the two detected SUHD-2HD cards from the list when creating a 2×3 wall display. Or,* *Drag up to six detected Sequoia UHD without SUHD-2HD card from the list when creating up to six 1×1 wall display. Or,* *Drag up to four detected Sequoia UHD+ with SUHD-2HD card from the list when creating a 3×4 wall display.*
❸ **TX list**	Shows the detected TXs as possible video source for assigning to the video wall windows, as well as a snapshot of the detected TX displays. Click any of the TX to update its snapshot as well as any RX window in the video wall design area ❹ paired to this particular TX.

❹ **Video wall design area**	Add/remove/move windows and change its size in this area. A 2×3 wall display is comprised of a 2×2 (maximum of four windows) plus a 2×1 wall (maximum of four windows) for a maximum of eight windows. A 1×1 wall display is comprised of maximum six 1×1 walls. A 3×4 wall display is comprised of two 2×2 (maximum of eight windows) plus two 1×2 wall (maximum of eight windows) for a maximum of 16 windows. *Note:* *1. For a 2×3 wall display, a window that straddles both 2×2 and 2×1 wall will be counted as one window for each wall.* *For a 3×4 wall display, a window that straddles both 2×2 and 2×2 wall; or both 1×2 and 1×2 wall; or both 2×2 and 1×2 wall will be counted as one window for each wall.* *2. Adding a fifth window on either wall will cause the first window created or,* *from out of the four windows, the first window that your mouse cursor has clicked will become hidden from view by the system.* *But upon removing the newly added window, system will cause the hidden window to reappear on the same position/size prior to its being hidden.* *3. An image cannot straddle two 1×1 windows (cannot go beyond its border).*
❺ **User-defined preset 1/2/3**, **Save preset**, **Load preset**, **Delete preset**, **Close**, **Save**, **Take**, and **Genlock buttons**	User-defined preset 1/2/3 = each represents a saved preset. A preset is a file that contains user-designed window layout for a wall configuration. Users can have multiple presets stored in the Sequoia UHD for future references, but only the latest three presets saved can be loaded from these three buttons as shortcuts (only presets saved by using the **Save preset** button). When the number of presets reaches or exceeds three, any new preset saved will replace the old one (in the order of preset 1, 2, and 3). **Save preset** = saves to Sequoia UHD memory the configured window layout for future recall. File name (*.json): PRESET_6.json OK Cancel **Load preset** = select from a list of previously saved preset(s) to be loaded as the window layout. PRESET_1.json PRESET_2.json PRESET_3.json PRESET_4.json PRESET_5.json File name: Files of type: JSON (*.json) Open Cancel **Delete preset** = select a previously saved preset to be removed from memory. File name (*.json): PRESET_1.json OK Cancel **Close** = exit the **Video wall management** page. **Save** = saves the **Video wall management** page's configuration into Sequoia UHD for automatic recall of settings upon its next power on. **Take** = to confirm and execute the video wall's switching/routing action. **Genlock** = allows the video output of one source (coming from the **REF OUT** port of Sequoia UHD 1), or a specific reference signal from a signal generator, to be used to synchronize another source(s) together
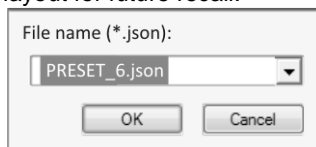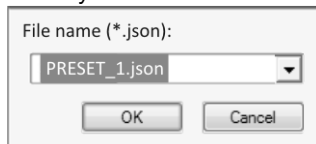
(to **REF IN** port of Sequoia UHD 2). The aim in video applications is to ensure the coincidence of signals in time at a combining or switching point. When video sources are synchronized in this way, they are said to be generator-locked, or genlocked.

Table 5-1 Video Wall Management Page Components

To create and set a 1×1 or 2×3 or 3×4 wall display, perform the following steps:

*Step 1. On the video wall connection diagram area, right-click anywhere and then click **Add**.*
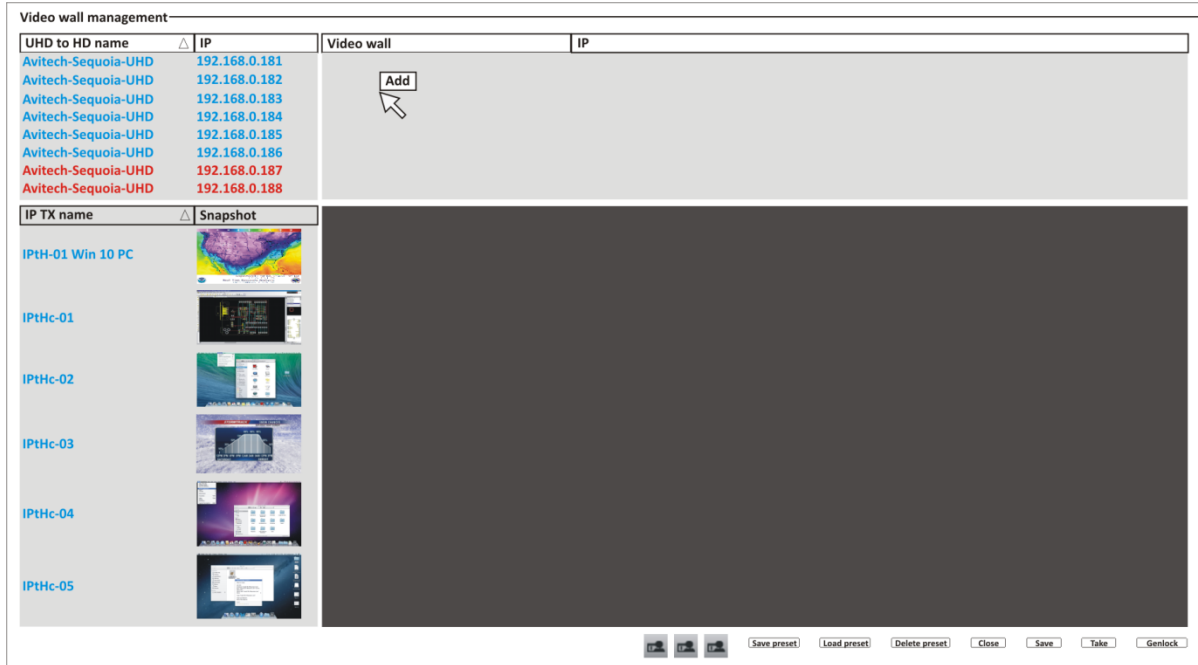
Figure 5-2 Add Video Wall

*Step 2. The **Define wall name** dialog box will appear, select **1 × 1** or **2 × 3** or **3 × 4** and assign a **wall name**. Then click **OK**.*
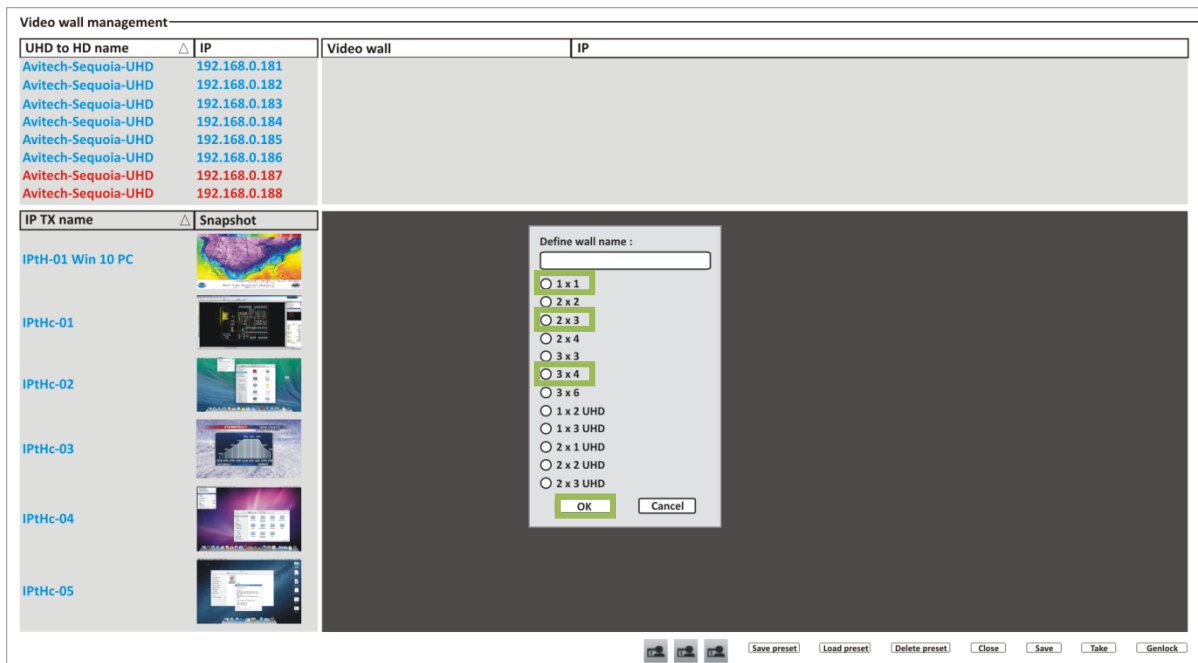
Figure 5-3 Select 1×1 or 2×3 or 3×4 Wall Display and Assign a Name

The wall name and wall configuration will be shown.
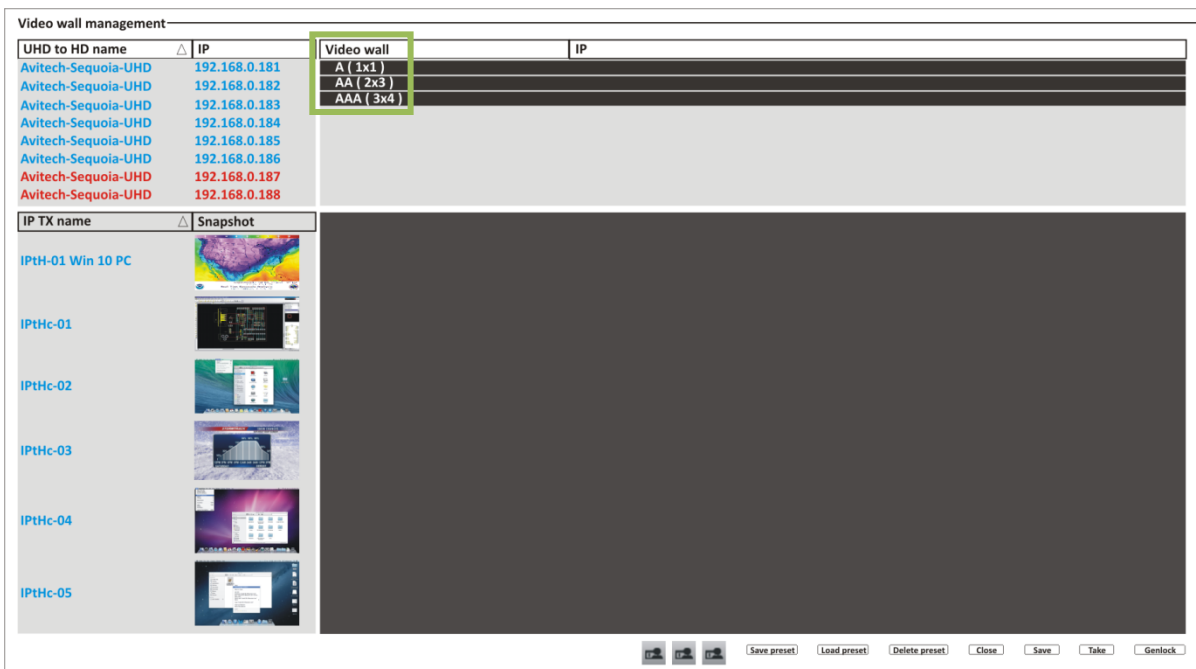
Figure 5-4 Wall Name and Wall Configuration Defined

Step 3. <u>For 1×1 Wall Display</u>
Drag five (maximum up to six) Sequoia UHD (i.e. **IP:192.168.0.181** *up to* **192.168.0.185**) *to the wall name (***A** *(1 × 1)) you just created. Notice that as you drag each Sequoia UHD to the wall name it would then create a branch from the wall name.*
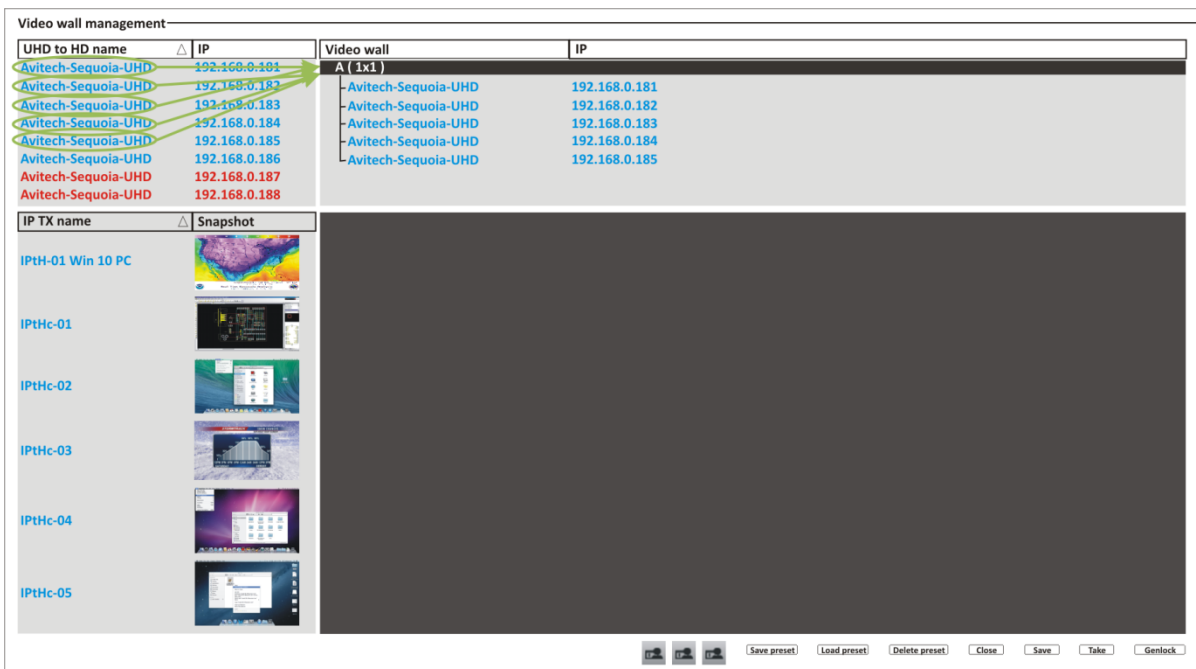
Figure 5-5 Assign the Five Sequoia UHD to the Wall

For 2×3 Wall Display
Drag the two Sequoia UHD/T+ (i.e. **IP:192.168.0.187** and **192.168.0.188**) to the wall name (**AA (2 × 3)**) you just created. Notice that as you drag each Sequoia UHD/T+ to the wall name it would then create a branch from the wall name.
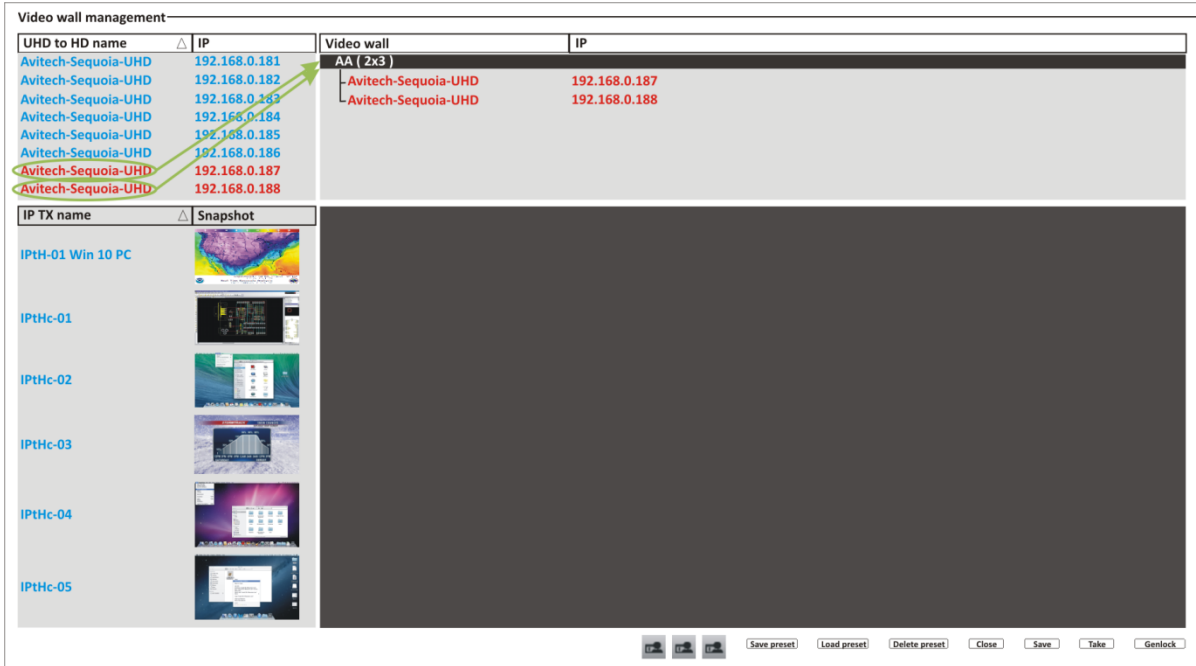
Figure 5-6 Assign the Two Sequoia UHD/T+ to the Wall

For 3×4 Wall Display
Drag the four Sequoia UHD+ (i.e. **IP:192.168.0.185** up to **192.168.0.188**) to the wall name (**AAA (3 × 4)**) you just created. Notice that as you drag each Sequoia UHD+ to the wall name it would then create a branch from the wall name.
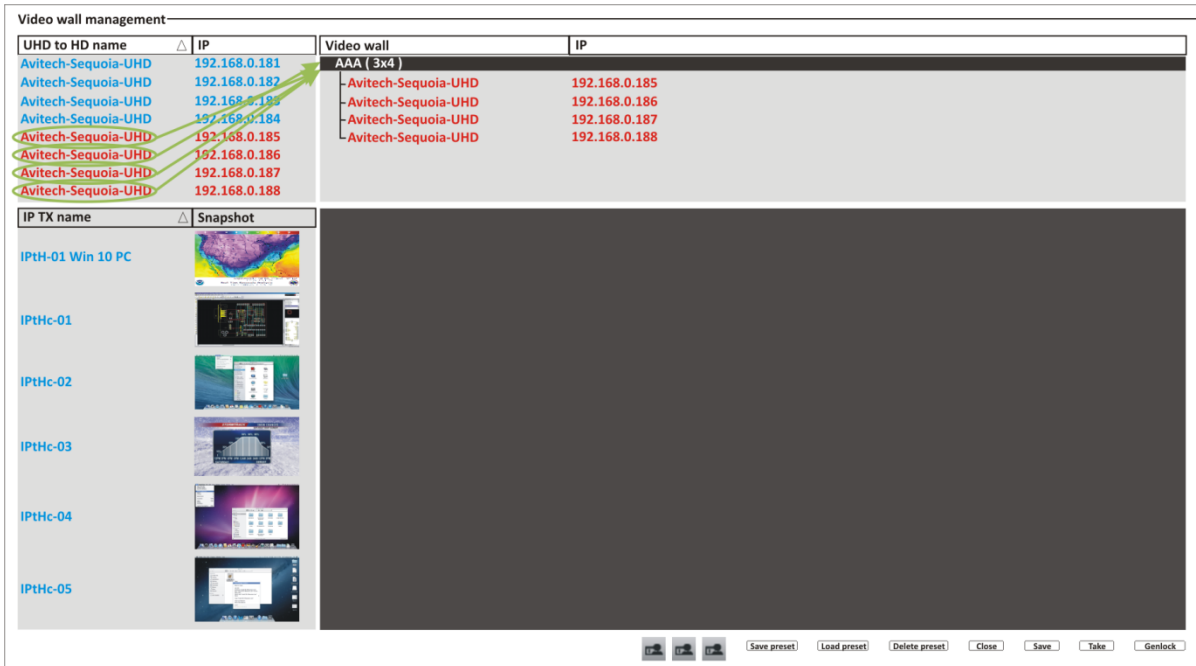
Figure 5-7 Assign the Four Sequoia UHD+ to the Wall

The Sequoia UHD branch can be deleted anytime by right-clicking it and selecting (clicking) **Delete**.

Step 4. Double-click the wall name.
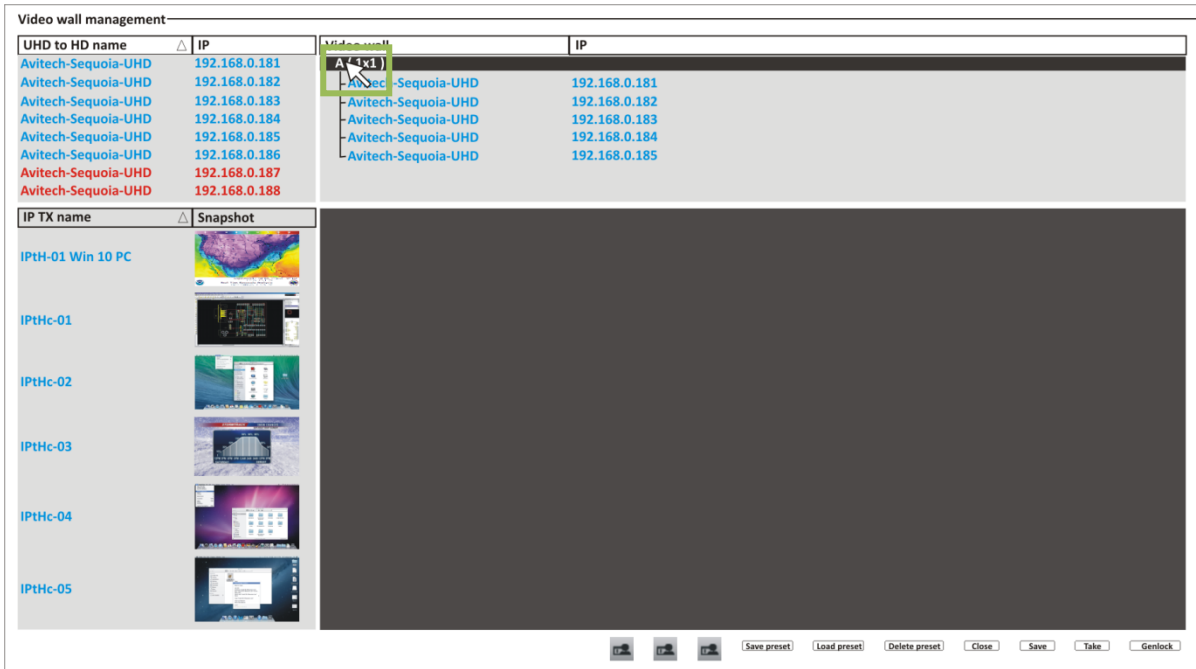
Figure 5-8 Double-click the Wall Name

For 1×1 Wall Display
The template for a 1×1 wall that comprises six displays appear.
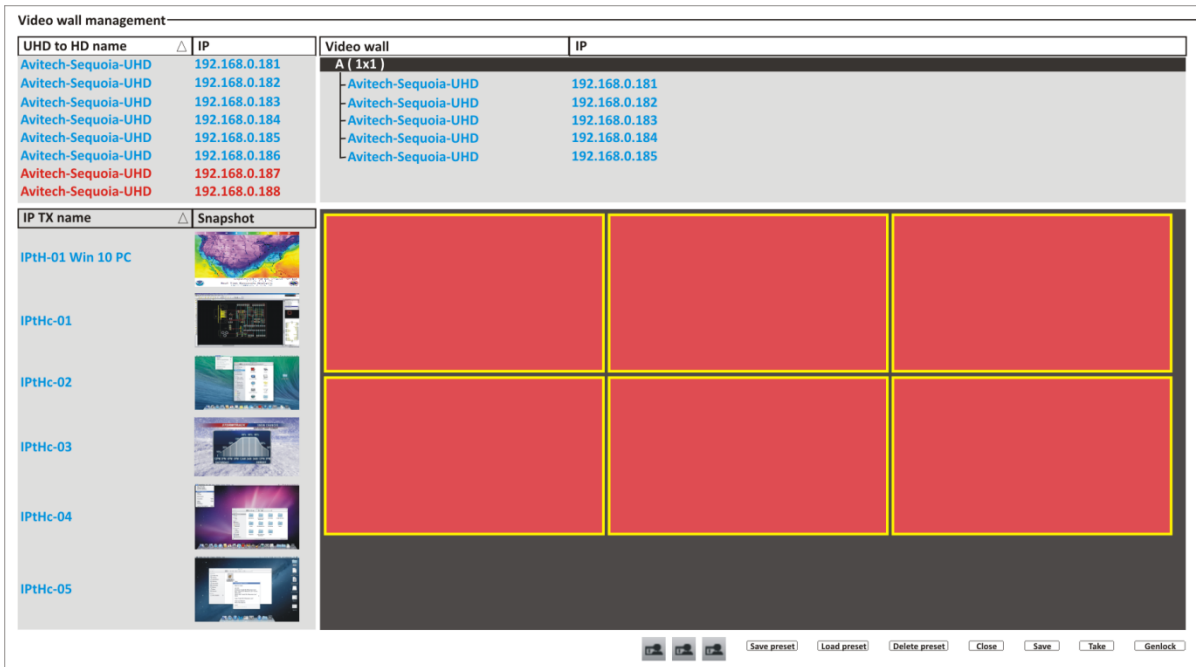
Figure 5-9 Six Displays Form an 1×1 Wall

For 2×3 Wall Display
The template for a 2×3 wall that comprises a 2×2 wall beside a 2×1 wall appears.
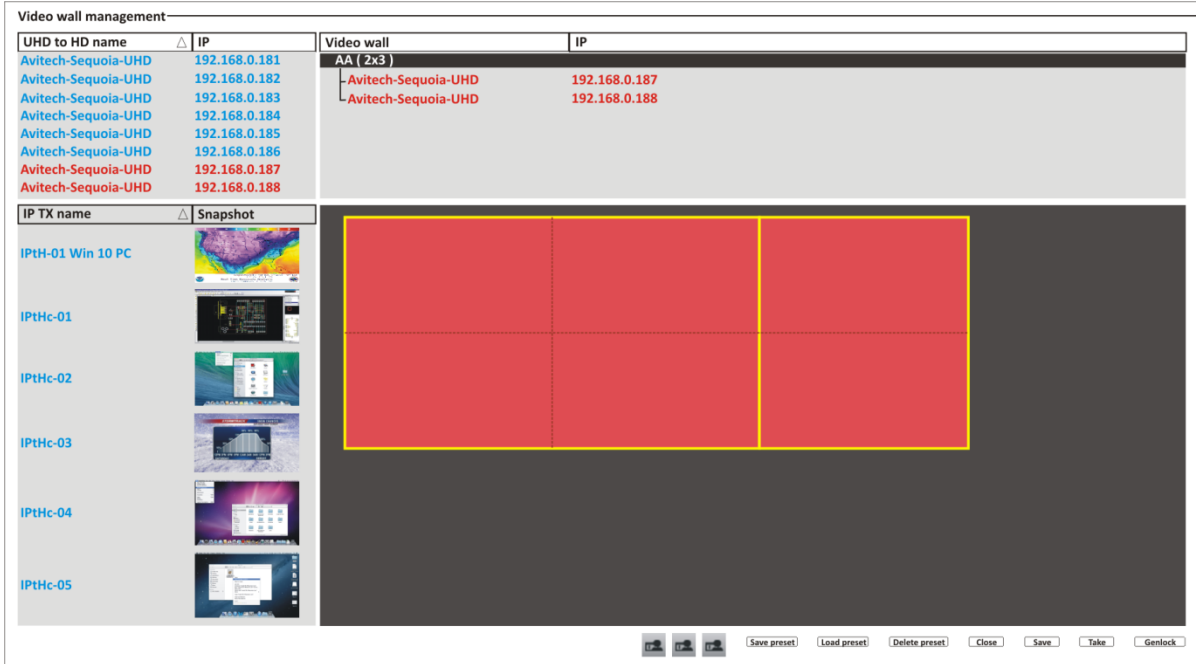
Figure 5-10 2×2 Wall Plus 2×1 Wall to Form a 2×3 Wall

For 3×4 Wall Display
The template for a 3×4 wall that comprises two 2×2 wall on top of two 1×2 wall appears.
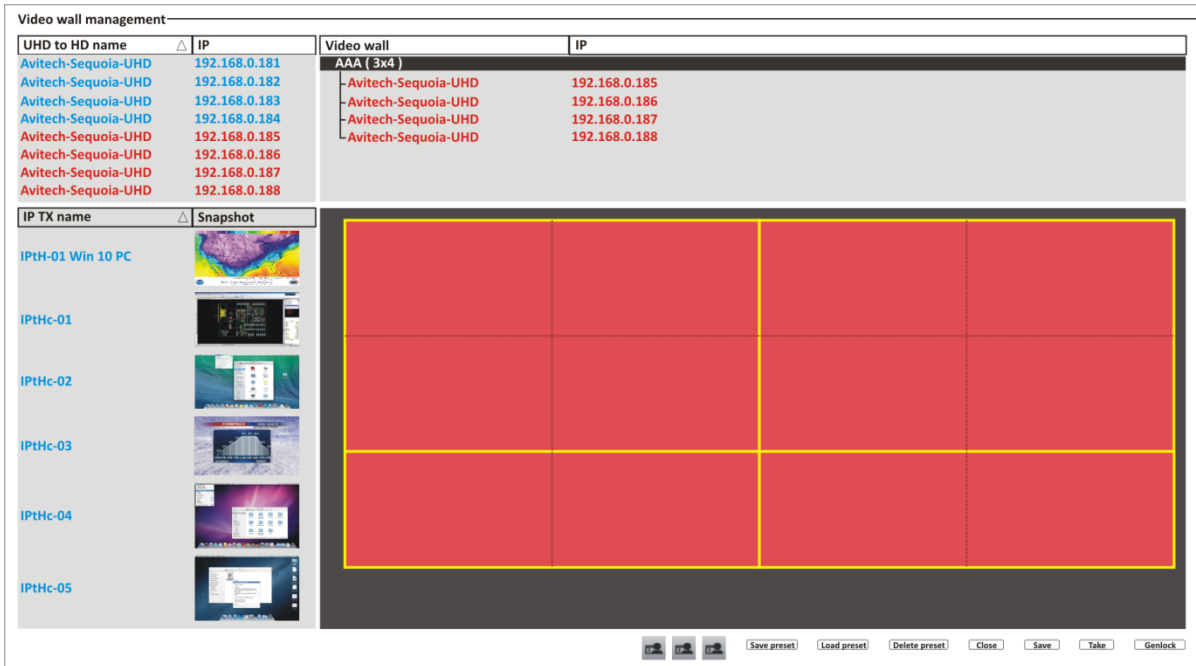
Figure 5-11 Two 2×2 Wall on Top of Two 1×2 Wall to Form a 3×4 Wall

Set Genlock Source

*Except for a 1×1 wall (because an image cannot straddle two 1×1 windows (cannot go beyond its border)), all other wall configuration can set the genlock source to allow the video output of one source (coming from the **REF OUT** port of Sequoia UHD 1), or a specific reference signal from a signal generator, to be used to synchronize another source(s) together (to **REF IN** port of Sequoia UHD 2); and so forth. The aim in video applications is to ensure the coincidence of signals in time at a combining or switching point. When video sources are synchronized in this way, they are said to be generator-locked, or genlocked.*

To set the genlock source:

➤ *Designate a Sequoia UHD to be the reference signal (i.e. Sequoia UHD with IP address: 192.168.0.185). Make sure that the BNC cable is connected to the **REF OUT** port.*

➤ *Connect the other end of the BNC cable to the **REF IN** port of the Sequoia UHD with IP address: 192.168.0.186.*

➤ *Right-click this Sequoia UHD (IP address: 192.168.0.185) and select (click) **Genlock source**. Notice that a checkmark appears signifying that it has been enabled. The text color for this particular branch of Sequoia UHD changes to "green" signifying that this is the genlock source device.*

➤ *Click the **Genlock** button (on the lower right). Notice on your wall display that the monitors connected to the Sequoia UHD as genlock source will flicker and then stabilize. Then the wall display that the monitors connect to the next Sequoia UHD will flicker and then stabilize. This phenomenon can be observed when additional Sequoia UHD is daisy-chained in this manner.*

This concludes setting the genlock source.
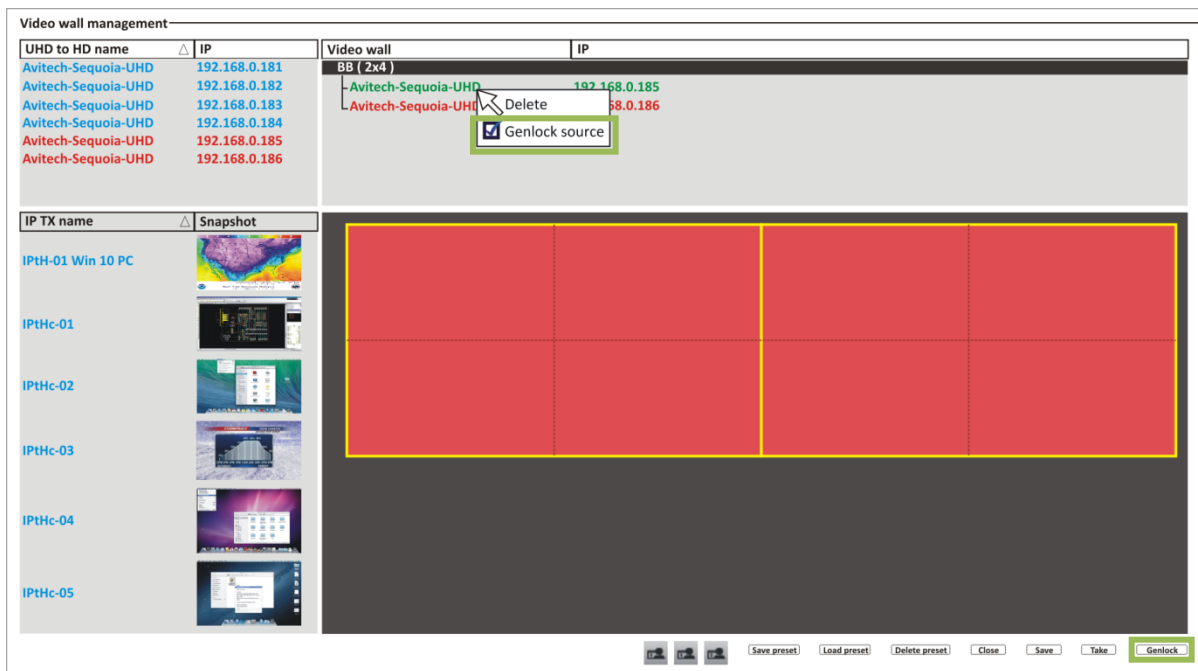
Figure 5-12 Set Genlock Source for 2×4 Wall

Step 5. *For 1×1 Wall Display*

Drag a Sequoia UHD to each of the five displays. Notice that the name and IP address of each Sequoia UHD is displayed in the center of each display.
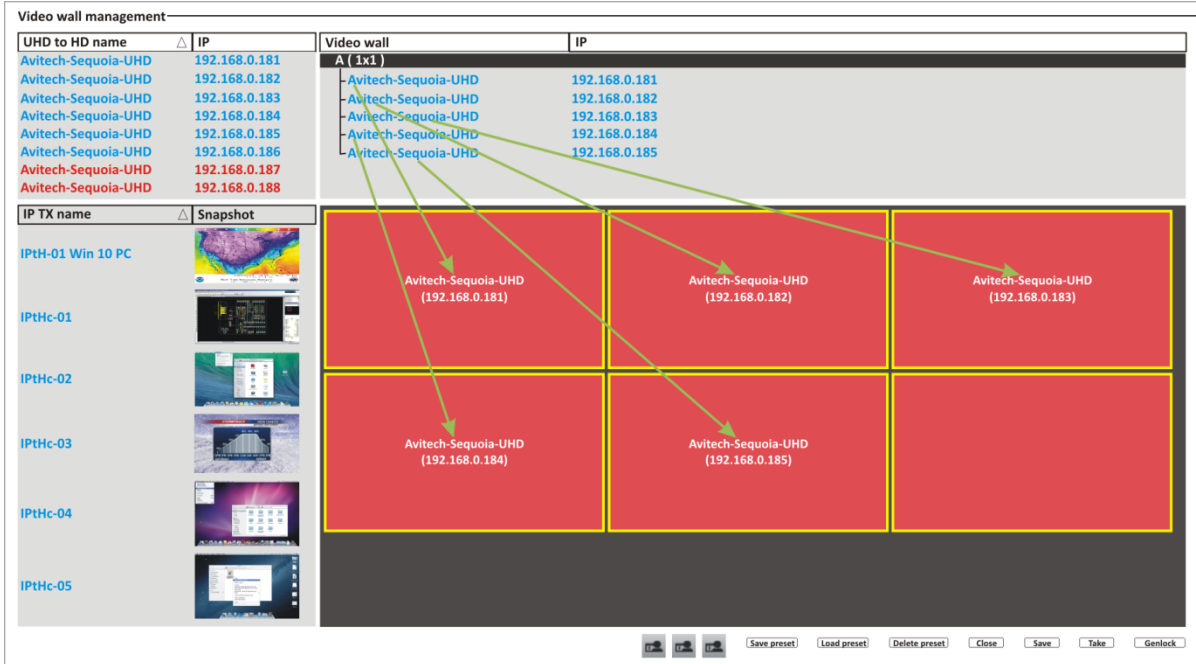
Figure 5-13 Drag a Sequoia UHD to Each Display

To remove a Sequoia UHD that has been assigned to a display, right-click anywhere on the display and click **Remove device** *on the menu that appears. This applies to a 2×3 and 3×4 wall display as well.*

For 2×3 Wall Display

Drag a Sequoia UHD/T+ to the 2×2 wall template and the other Sequoia UHD/T+ to the 2×1 wall template. Notice that the name and IP address of each Sequoia UHD/T+ is displayed in the center of each wall template.
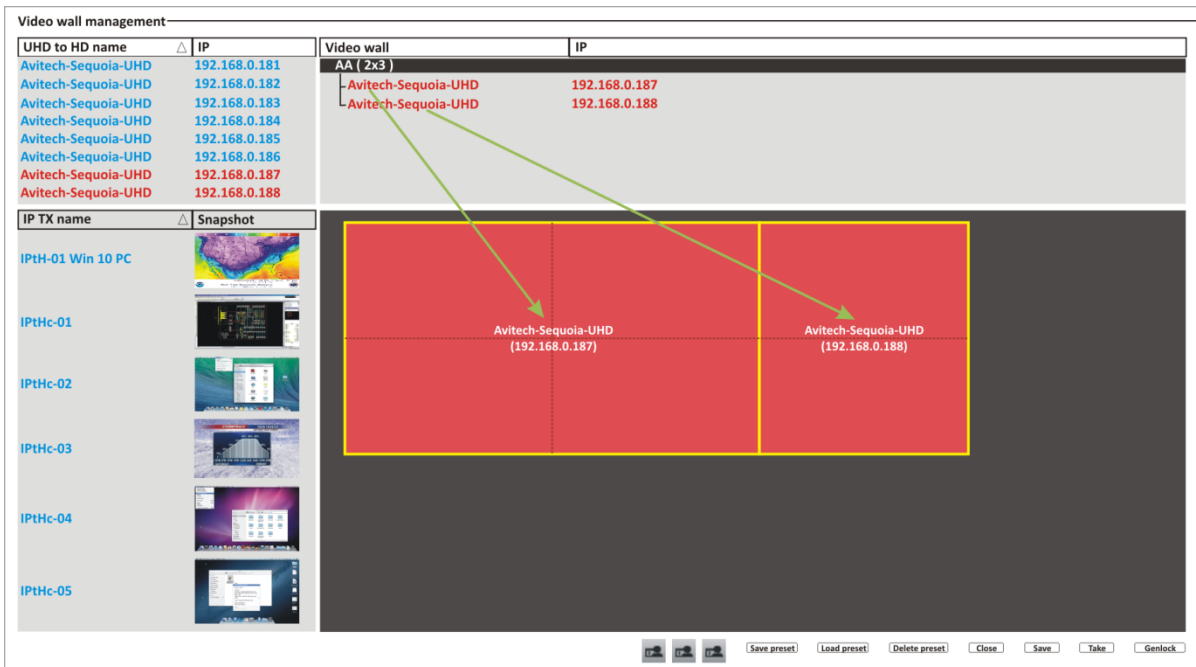
Figure 5-14 Drag Each Sequoia UHD/T+ to the Wall Template

For 3×4 Wall Display
Drag a Sequoia UHD+ to each of the four displays. Notice that the name and IP address of each Sequoia UHD+ is displayed in the center of each wall template.
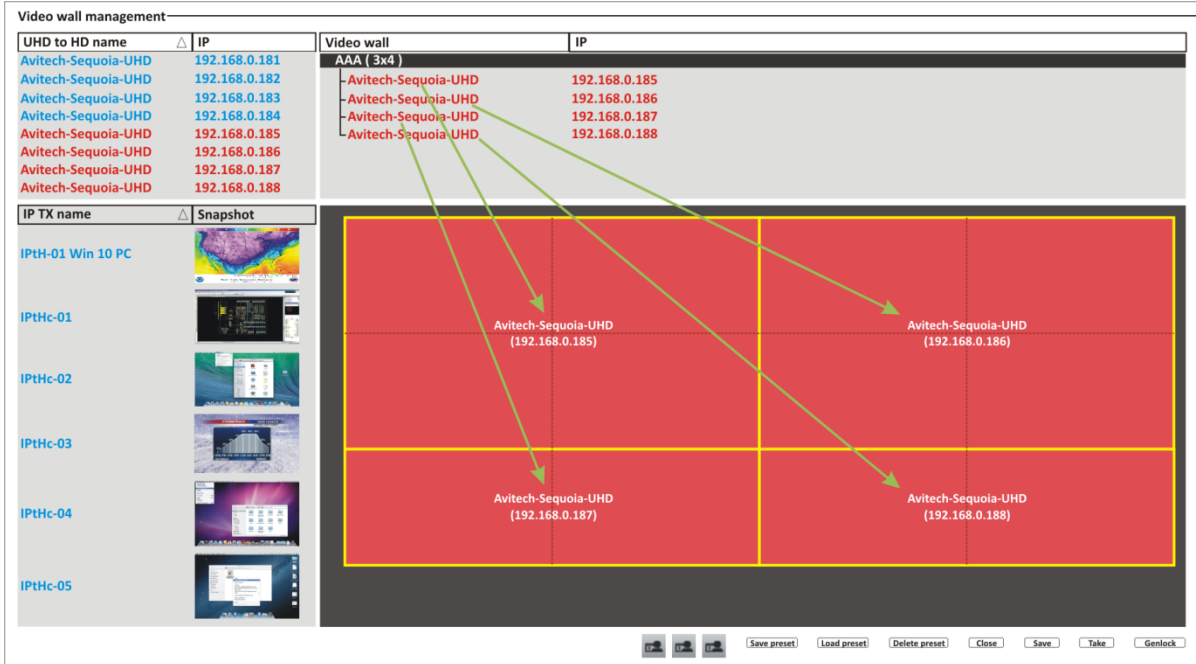
Figure 5-15 Drag Each Sequoia UHD+ to the Wall Template

Step 6. *For 1×1 Wall Display*
On the 1×1 wall template, right-click anywhere on a display and then click **Add window**.
Perform the same step to each of the other four displays.
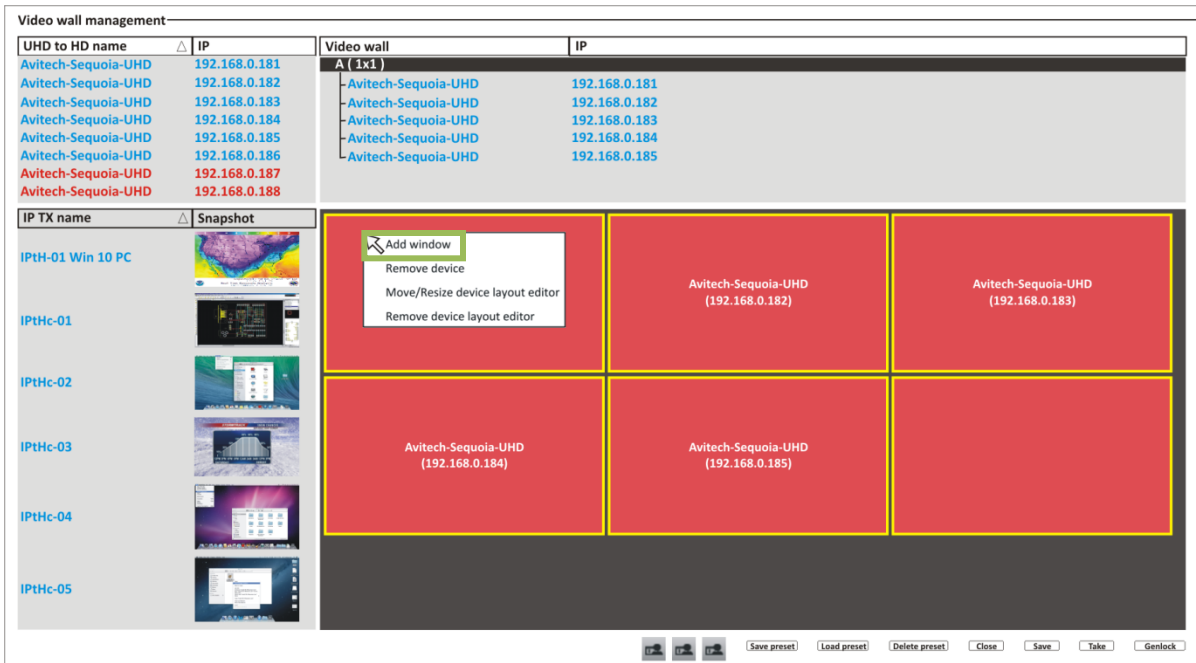
Figure 5-16 Add Window to the 1×1 Wall Template

For 2×3 (and 3×4) Wall Display
*On the 2×2 wall template, right-click anywhere and then click **Add window**.*
*Perform the same step to **Add window** on the 2×1 (and 1×2) wall template.*
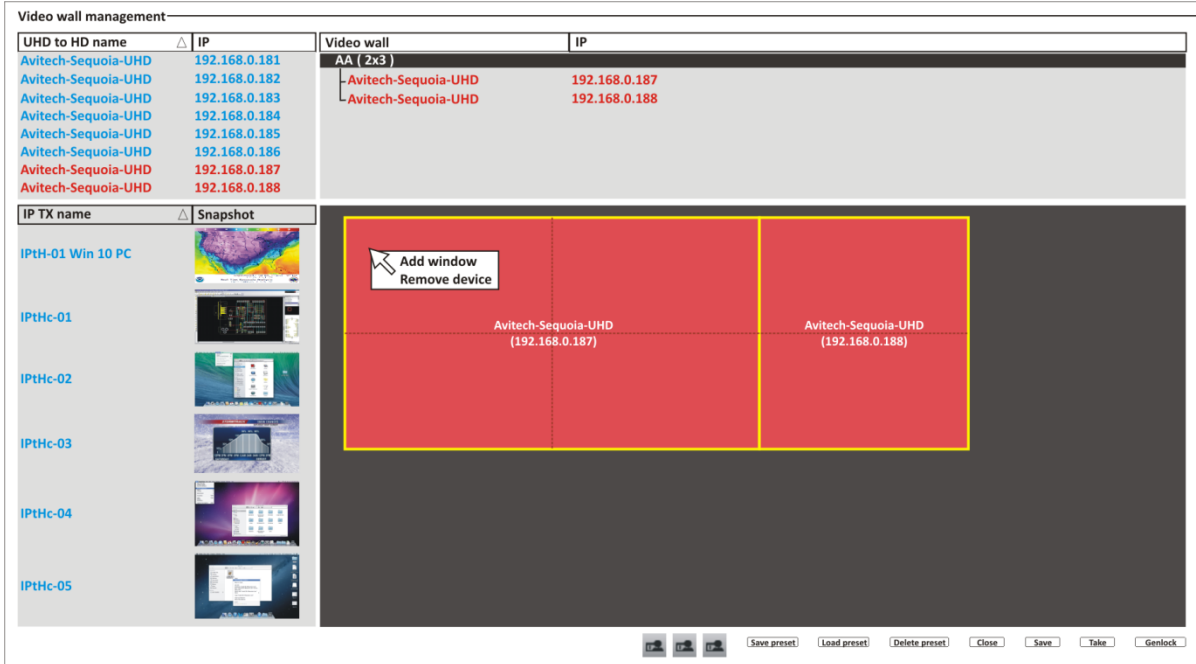
Figure 5-17 Add Window to the 2×2 Wall Template
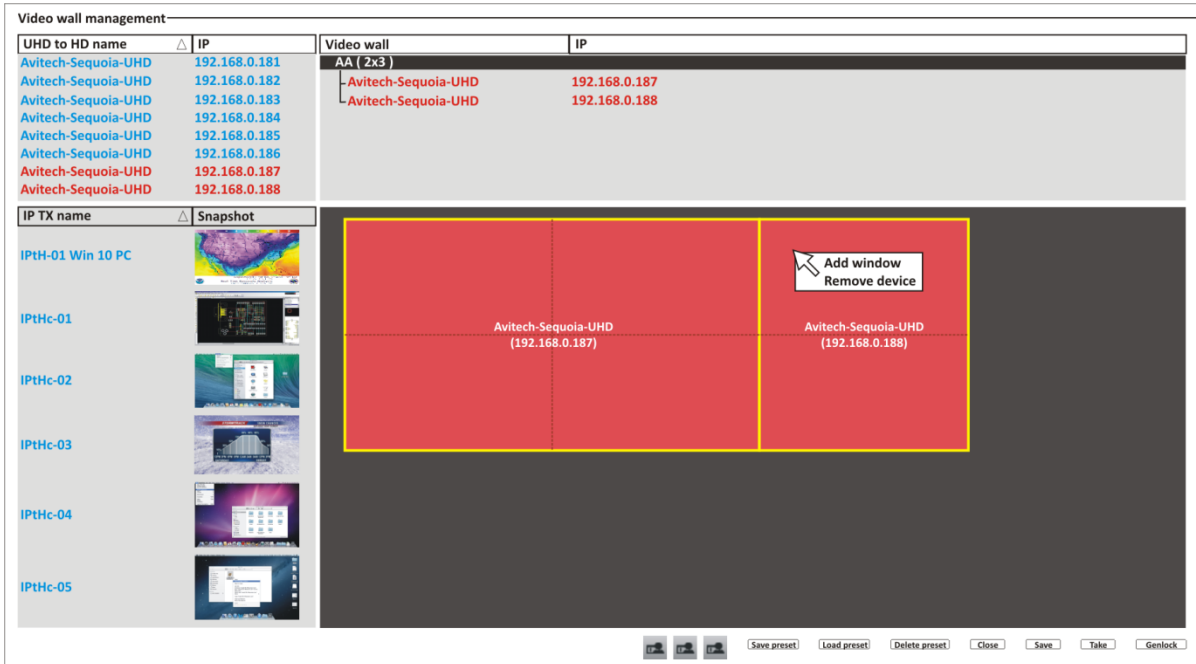
Figure 5-18 Add Window to the 2×1 Wall Template

For 1×1 Wall Display

Notice that a window outline appears on the upper left corner of a display of 1×1 wall template. Likewise, a window outline will appear on the upper left corner of the other four displays of 1×1 wall template upon adding a window to it.
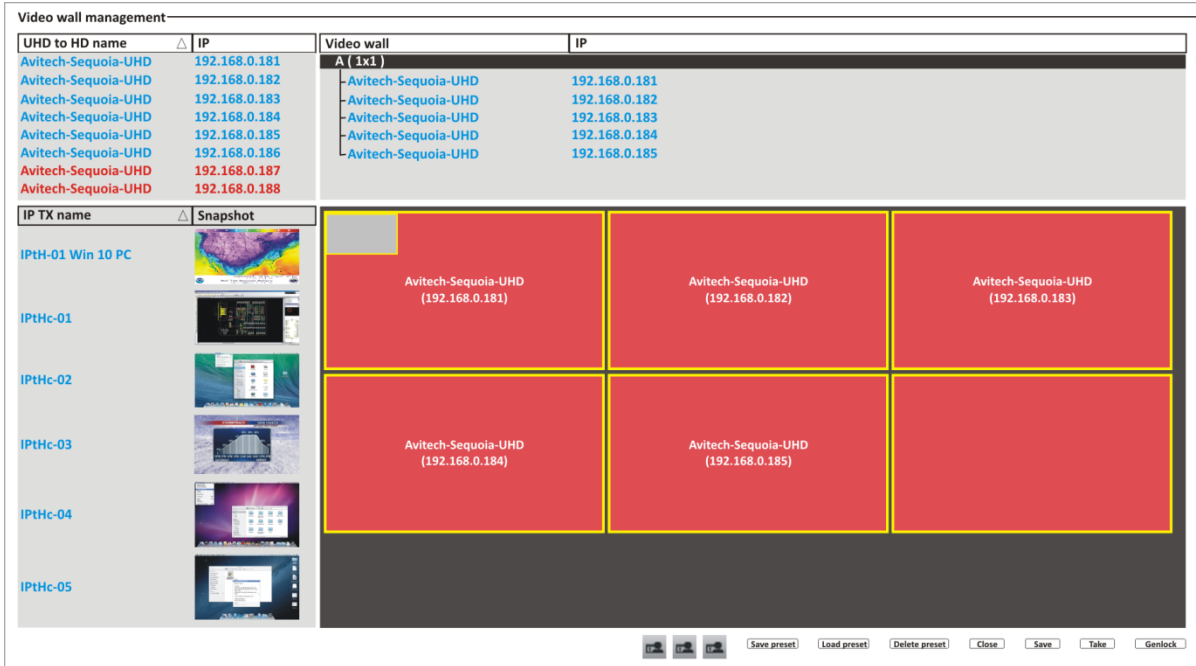
Figure 5-19 Window Outline Appears Upon Adding a New Window to the 1×1 Wall Template

For 2×3 Wall Display

Notice that a window outline appears on the upper left corner of the 2×2 wall template. Likewise, a window outline will appear on the upper left corner of the 2×1 wall template upon adding a window to it.
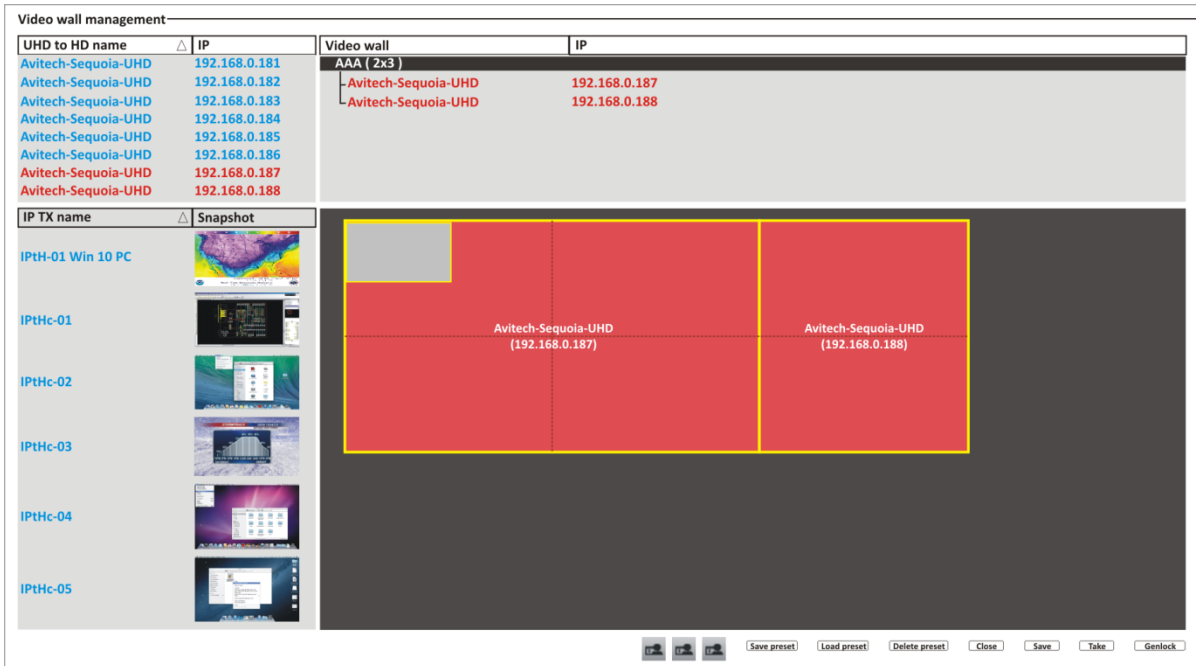
Figure 5-20 Window Outline Appears Upon Adding a New Window to the 2×2 Wall Template
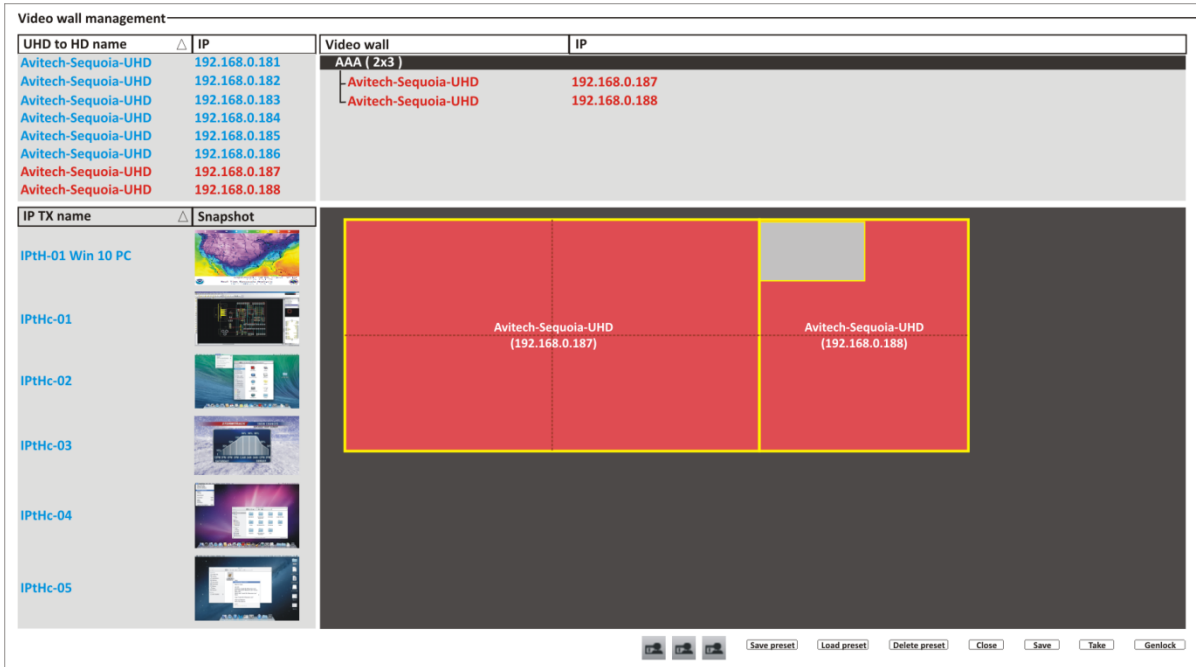
Figure 5-21 Window Outline Appears Upon Adding a New Window to the 2×1 Wall Template

Step 7. *Two methods are available when assigning TX source to a window:*

Method 1. Drag the TX snapshot or IP TX name to the blank window. Notice that the window now displays the corresponding TX source image.

Method 2. Click to highlight (select) a TX source. Right-click anywhere on the wall template and then click **Add window***. Notice that the new window already contains the corresponding TX source image.*
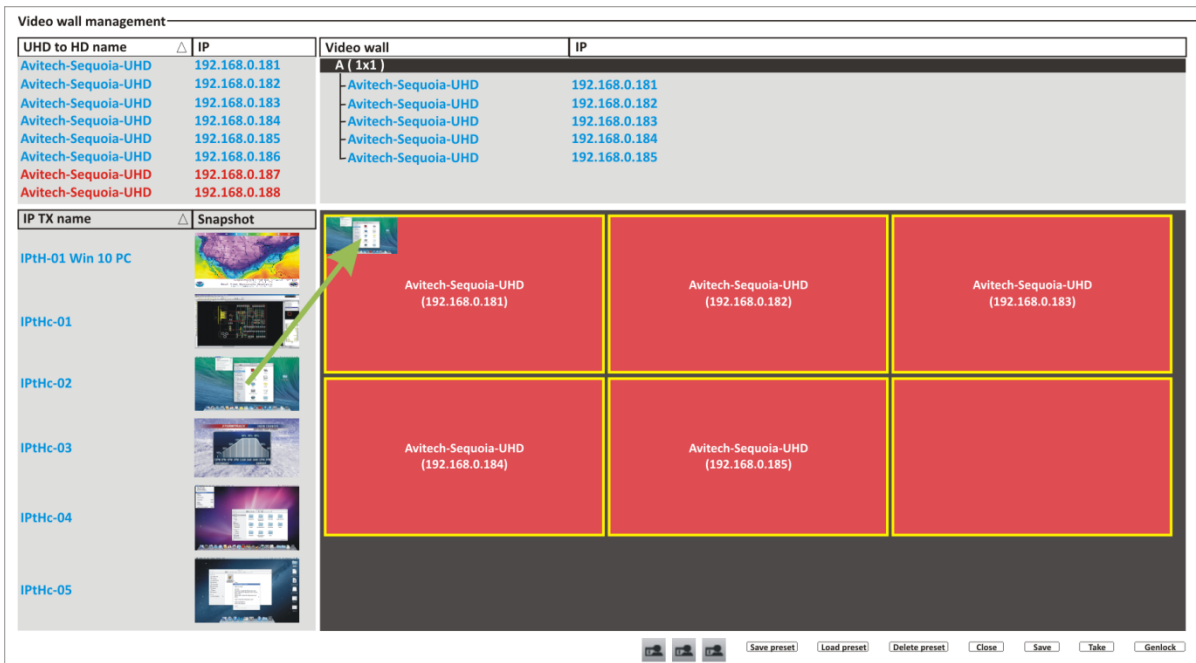
Figure 5-22 Drag the TX Snapshot to the Blank Window in the 1×1 Wall Template

Dragging another TX snapshot to a window that has a previously assigned TX source will replace the former source.

Figure 5-23 Drag the TX Snapshot to the Blank Window in the 2×2 Wall Template
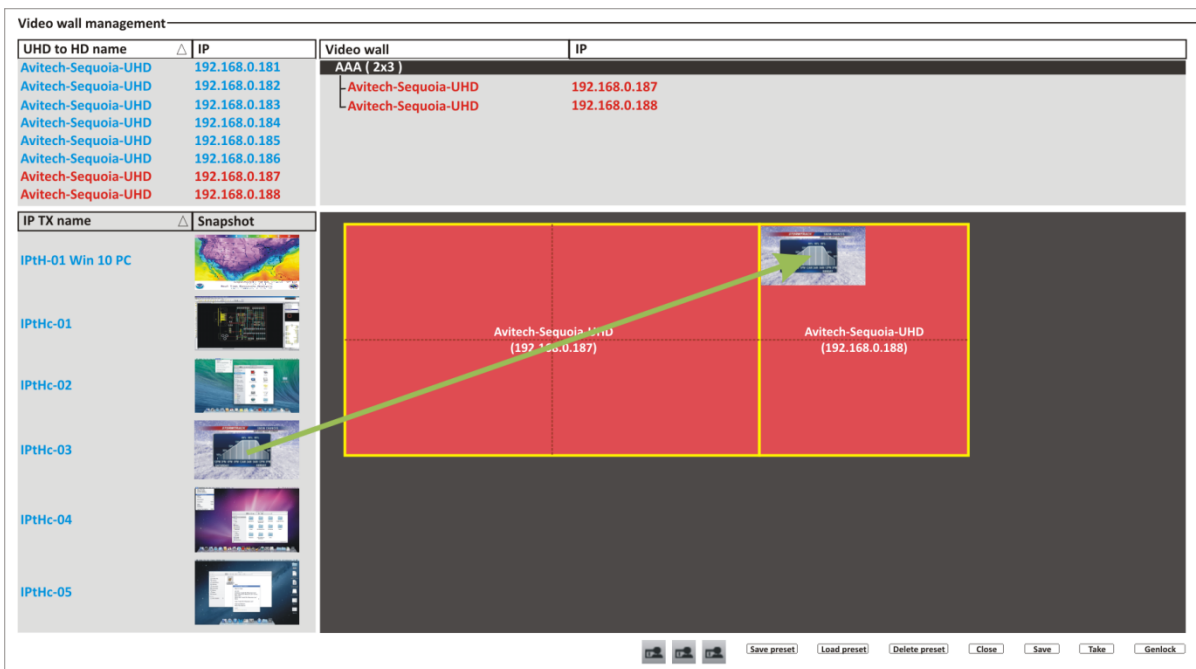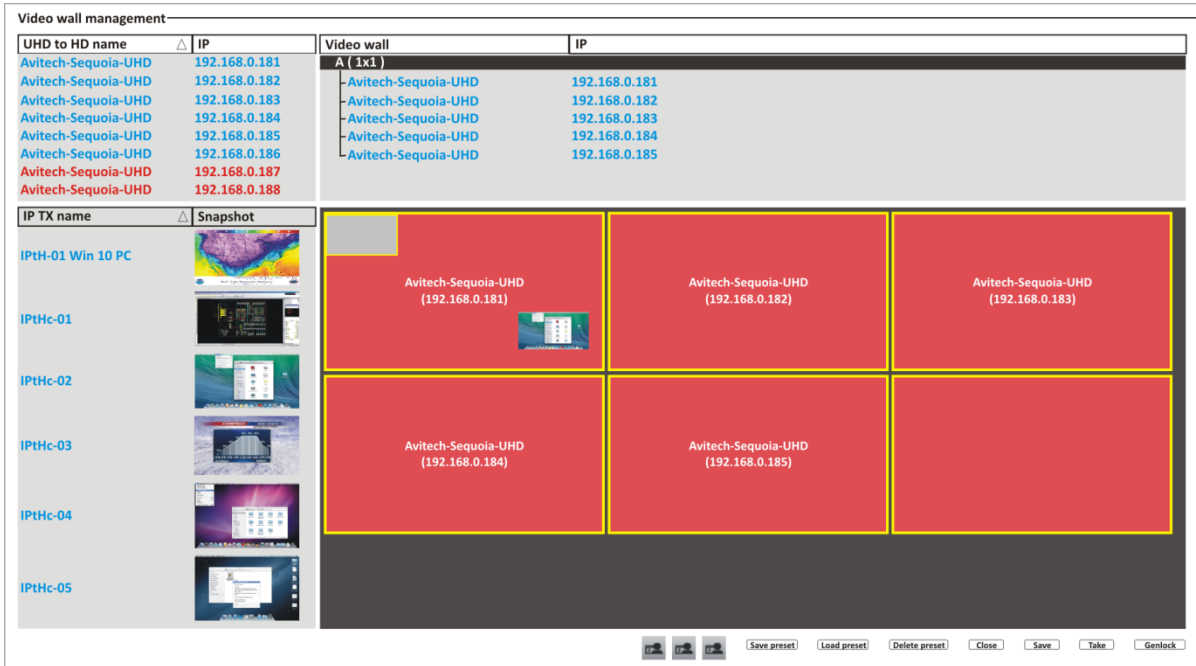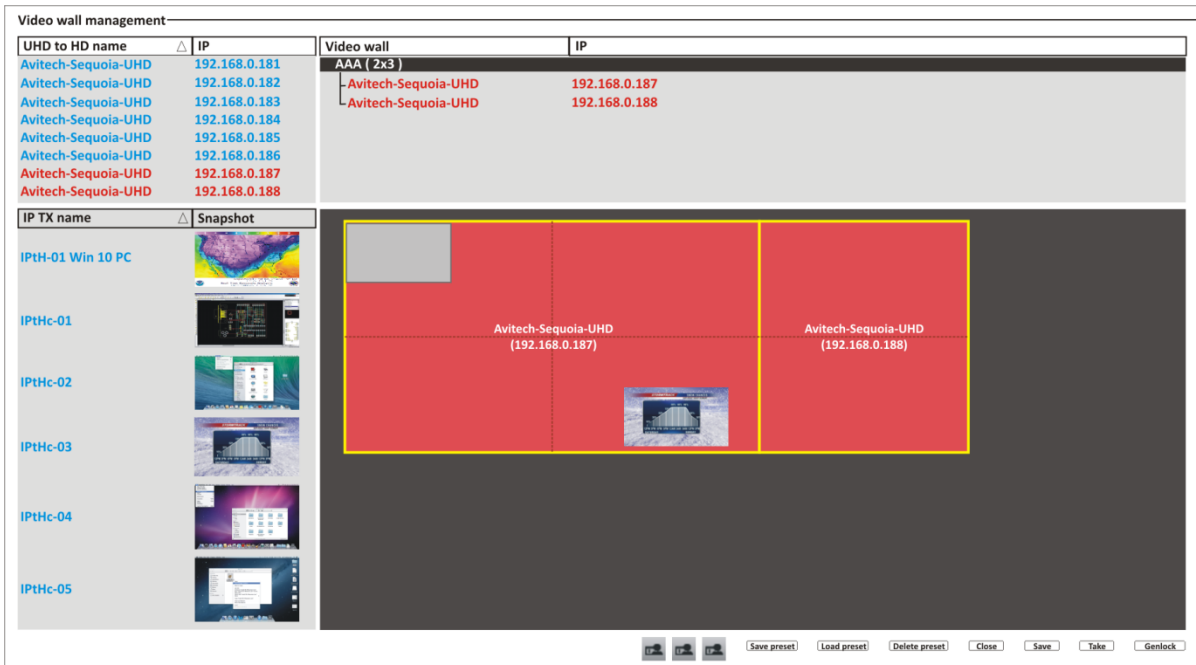
Figure 5-24 Drag the TX Snapshot to the Blank Window in the 2×1 Wall Template

Step 8. Before adding another new window, move aside (drag-and-drop) the first window so as not to cause the new window to cover-up the first window. Every new window will originate on the upper left corner of each wall.

Figure 5-25 Adding a Second Window to the 1×1 Wall Template

Figure 5-26 Adding a Second Window to the 2×2 Wall Template

Figure 5-27 Adding a Second Window to the 2×1 Wall Template

Continue to add / move (by clicking a window and without letting go of the mouse button to drag it to its new location before letting go) / change window size (by clicking and dragging on any of the four sides of a window) in this area.
Each display in the 1×1 wall can contain a maximum of four windows for a total of 24 windows. The 2×2 wall can contain a maximum of four windows and the 2×1 wall can also contain a maximum of four windows for a total of eight windows in the combined 2×3 wall.
Each of the two 2×2 wall can contain a maximum of four windows and each of the two 1×2 wall can also contain a maximum of four windows for a total of 16 windows in the combined 3×4 wall.

1. Adding a fifth window to a display of the 1×1 wall is not allowed.
2. A window that straddles both 2×2 and 2×1 walls (as well as a window that straddles both 2×2 and 1×2 walls) will be counted as one window for each wall.
*3. Adding a fifth window on either 2×2 and 2×1 walls and upon clicking the **Take** button may cause any of the following to occur:*
   a. To cause the first window created to be hidden from view, or
   b. To cause the first window that your mouse cursor has clicked out of the other three windows (not necessarily the first window created) to become hidden from view.
*But upon removing the newly added window and clicking the **Take** button, system will cause the hidden window to reappear on the same position/size prior to its being hidden.*
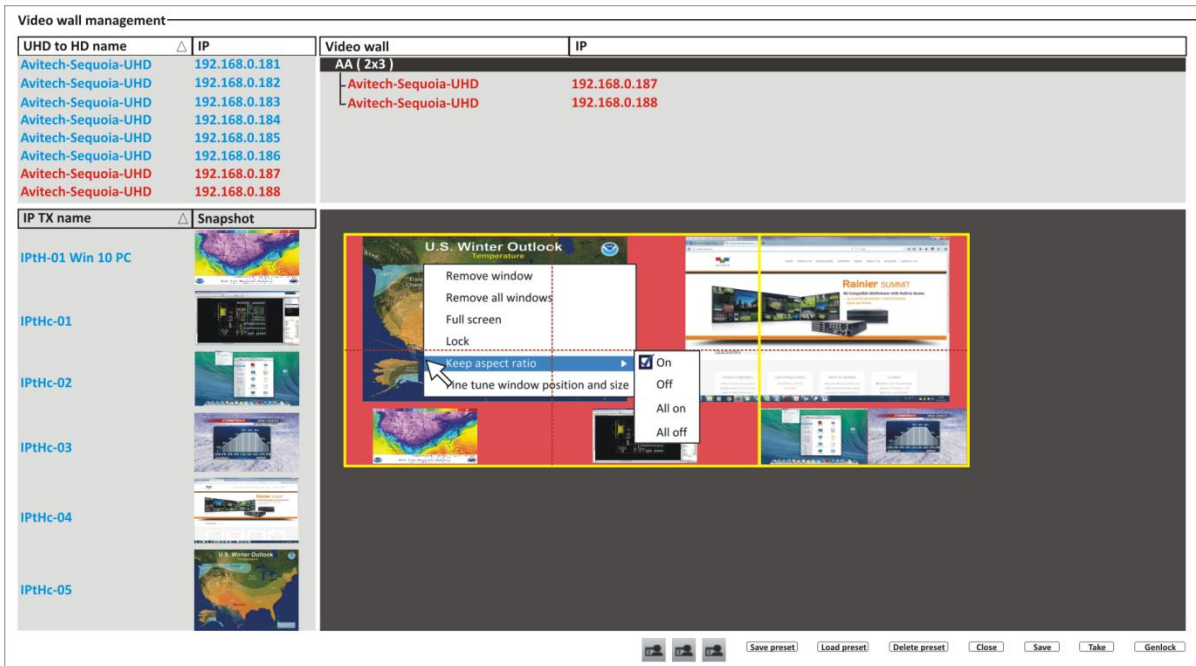
Figure 5-28 Right-click Menu for a Window in a Wall Display

Upon right-clicking a window in the wall display, the following commands are available:

√ **Remove window** – *removes a selected window from the wall.*

√ **Remove all windows** – *removes all windows from the wall display.*

√ **Full screen** – *transforms the selected window to full screen view (occupies the whole wall or a whole display in the 1×1 wall).*

√ **Lock** – *toggles between locking/unlocking a selected window's position and size (with/without checkmark).*

√ **Keep aspect ratio** – *confines a/all window(s) to a fixed width-to-height ratio; a resized window will also follow this aspect ratio. By default, the aspect ratio of a window is set to match that of its corresponding video source.* **On** – *default.*

1. **Keep aspect ratio** > **All off**, *and upon adding a new window, the new window's default setting will still be* **On**.
2. **Keep aspect ratio** > **On**, *when dragging the window's side to change its size and after lifting the left mouse button, please wait awhile for system to recalculate the aspect ratio of the window based on its width.*
3. *Double-clicking a window (window must not straddle two monitors) will cause it to become full screen mode (1080p) on the monitor that it currently occupies. If the window has* **Keep aspect ratio** > **On** *setting prior to becoming full screen mode, system will automatically change its setting to become* **Off**.
4. *Double-clicking a window that straddles two monitors will not have any effect.*

√ **Fine tune window position and size** – *upon clicking this, the following window appears:*
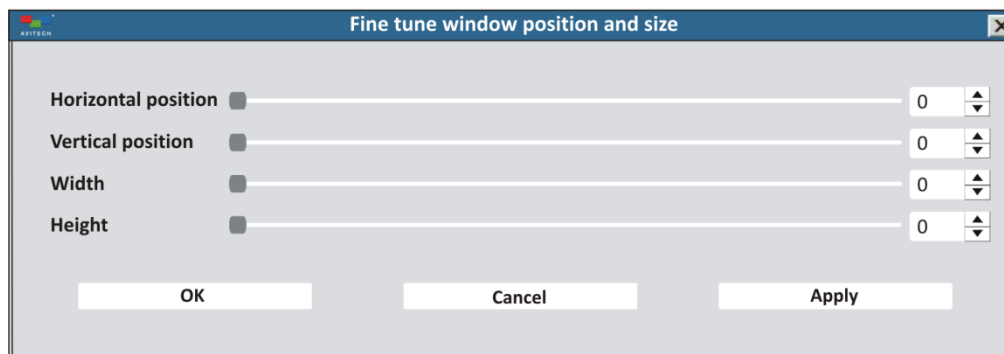
Figure 5-29 Fine Tune Window Position and Size

1. *The smallest window size for any video wall configuration = **960×540**. This means that if you are to set the **Width** of a window to be lower than **960** then system will automatically change it to **960**. Likewise, if you are to set the **Height** of a window to be lower than **540** then system will automatically change it to **540**.*
2. *Any adjustment for **Width** and **Height** would take priority over the values you could set for **Horizontal position** and **Vertical position**. For example, if you are to set the **Width** as 1920 and the **Horizontal position** as 1920 in a video wall display that has a maximum horizontal resolution of **3840**, then it is within the allowed valued because 1920 + 1920 = 3840. But if you are to set the **Width** as 1920 and **Horizontal position** as **1921**, then system will auto-correct your **Horizontal position** to be 1920 upon clicking the **Apply** button.*
3. *Freely re-position the **Fine tune window position and size** window so that upon clicking **Apply** the effects of your adjustment can be seen immediately. Click **OK** only when you are satisfied with your adjustment and leave this window.*

> **Horizontal position** – *allows you to set the window's starting horizontal position ($0 \sim x$)*
> *For a **1×1** video wall the maximum value (x) = **3840** – **960** = **2880**.*
> *The **1×1** video wall has a set width of **3840** pixels.*
>
> *For a **2×2** video wall the maximum value (x) = **3840** – **960** = **2880**.*
> *The value **3840** is derived from **1920 × 2**.*
>
> *For a **2×3** video wall the maximum value (x) = **5760** – **960** = **4800**.*
> *The value **5760** is derived from **1920 × 3**.*
>
> *For a **2×4 / 3×4** video wall the maximum value (x) = **7680** – **960** = **6720**.*
> *The value **7680** is derived from **1920 × 4**.*
>
> *For a **1×2 UHD / 2×2 UHD** video wall the maximum value (x) = **7680** – **960** = **6720**.*
> *The value **7680** is derived from **3840 × 2**.*
>
> *For a **1×3 UHD / 2×3 UHD** video wall the maximum value (x) = **11520** – **960** = **10560**.*
> *The value **11520** is derived from **3840 × 3**.*
>
> *For a **2×1 UHD** video wall the maximum value (x) = **3840** – **960** = **2880**.*
> *The **2×1 UHD** video wall has a set width of **3840** pixels.*
>
> **Vertical position** – *allows you to set the window's starting vertical position ($0 \sim y$)*
> *For a **1×1** video wall the maximum value (y) = **2160** – **540** = **1620**.*
> *The **1×1** video wall has a set height of **2160** pixels.*
>
> *For a **2×2 / 2×3 / 2×4** video wall the maximum value (y) = **2160** – **540** = **1620**.*
> *The value **2160** is derived from **1080 × 2**.*
>
> *For a **3×4** video wall the maximum value (y) = **3240** – **540** = **2700**.*
> *The value **3240** is derived from **1080 × 3**.*
>
> *For a **1×2 UHD / 1×3 UHD** video wall the maximum value (y) = **2160** – **540** = **1620**.*
> *The **1×2 UHD / 1×3 UHD** video wall has a set height of **2160**.*
>
> *For a **2×1 UHD / 2×2 UHD / 2×3 UHD** video wall the maximum value (y) = **4320** – **540** = **3780**.*
> *The value **4320** is derived from **2160 × 2**.*
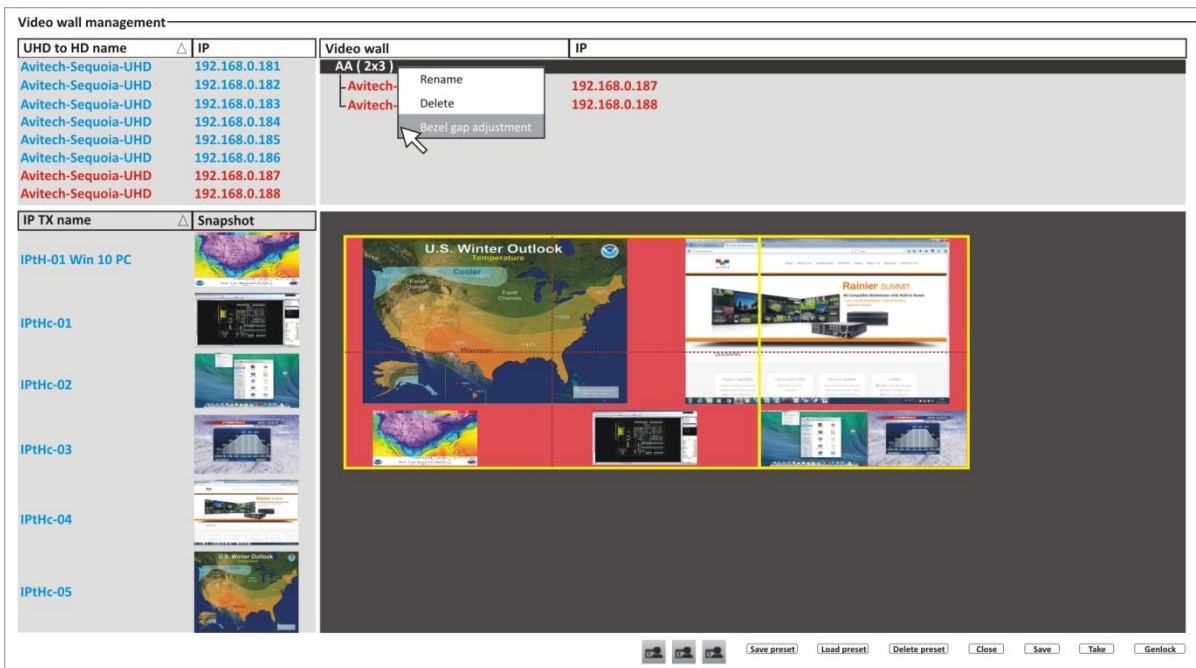
Figure 5-30 Right-click Menu for a Video Wall Name (Except 1×1 Video Wall)

*Upon right-clicking a video wall name, the following commands are available:*

√ **Rename** – *rename a selected video wall.*

√ **Delete** – *remove a video wall.*

√ **Show all device editors** – *show all wall displays in a 1×1 video wall that may have been closed.*

√ **Bezel gap adjustment** – *the following window appears. This item is not available for 1×1 wall display but instead the abovementioned item* **Show all device editors** *will appear instead.*
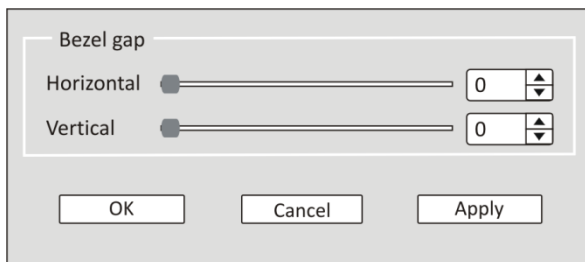
Figure 5-31 Bezel Gap Window

*The **Bezel gap** window allows you to adjust the pixel (offset) needed to align the image seamlessly; more specifically the middle horizontal and vertical bezels of the wall display so that your image/video spread on the monitors will appear more natural. The next two illustrations show a sample 2×2 wall display before and after bezel gap adjustment.*
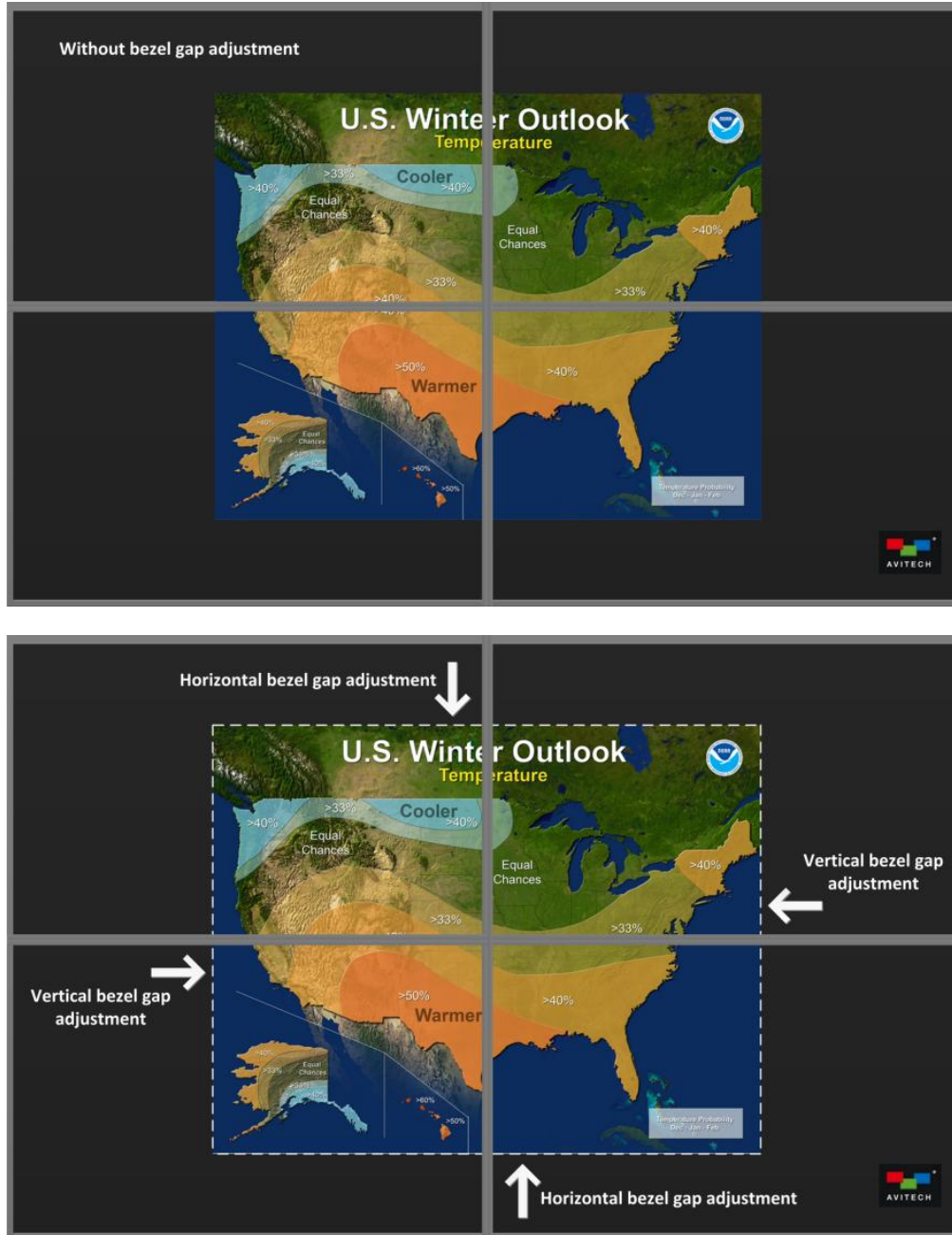
Figure 5-32 Sample 2×2 Wall Display Before and After Bezel Gap Adjustment

*Does the image appear to your satisfaction? If not, use the slider or input the number (**0~300 pixel**) to tweak your adjustment.*

1. *Make sure to **use an identical model and size of monitors** when outputting a signal source simultaneously to any wall display configuration.*
2. *Make sure to input at 4096×2160 resolution and output at 1920×1080 resolution.*
3. *This setting need be performed only once unless the monitors have been replaced.*

5.2 Additional Adjustments For 1×1 Wall Display

After adding a 1×1 wall display the default three horizontal walls by two vertical walls will appear. The system then allows you to rearrange the position of the six walls as well as remove any of the walls.
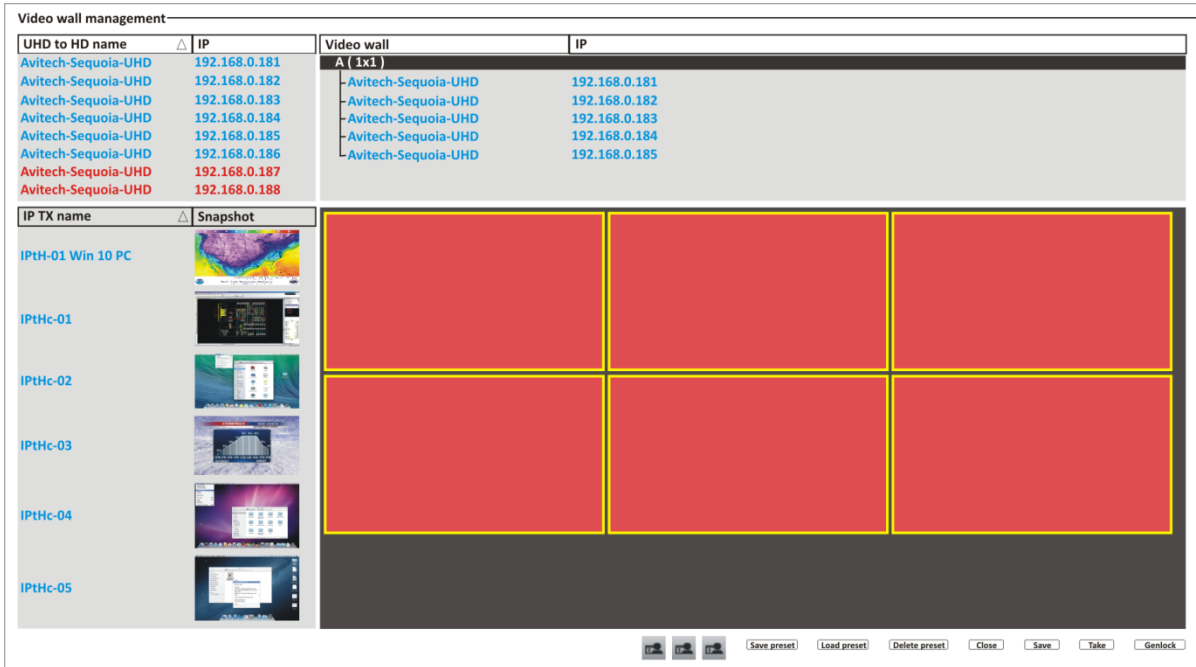
Figure 5-33 Default 1×1 Wall Configuration

For example we wish to rearrange the video wall layout to become like below (two large walls on top of three smaller walls). How should we go about it?
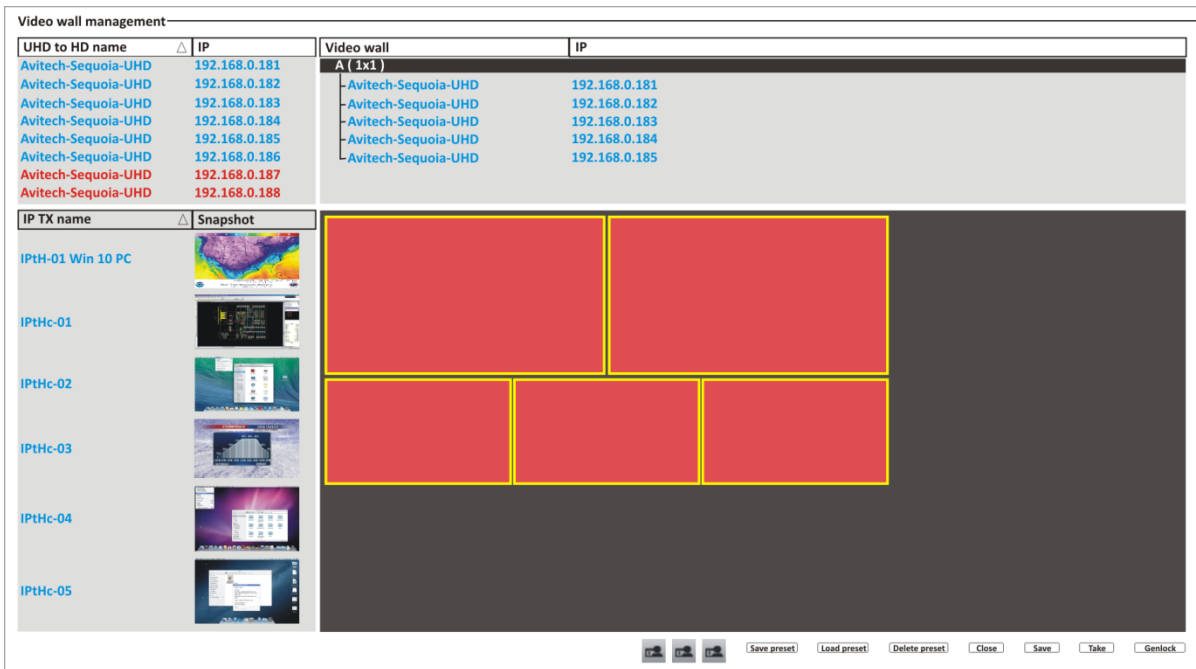
Figure 5-34 Designing a new 1×1 Wall Configuration

*Step 1. Pick a wall to remove by right-clicking it and clicking the last item **Remove device layout editor**.*
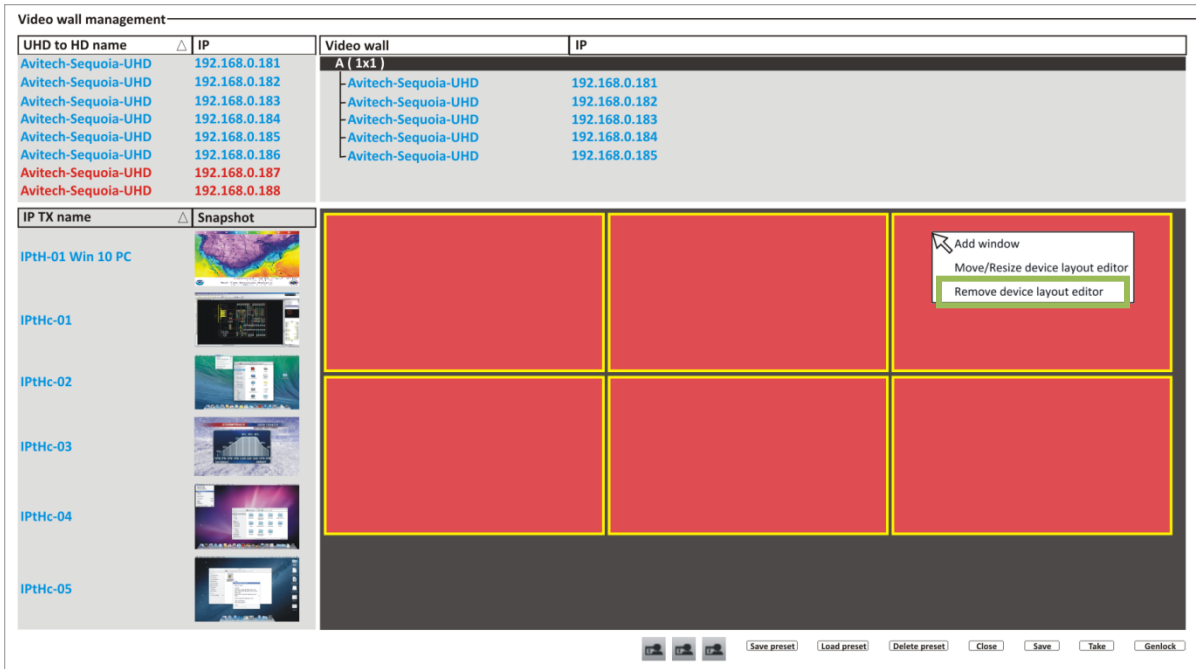
Figure 5-35 Remove a Wall

*Step 2. Right-click the lower left wall and click the item **Move/Resize device layout editor**. Notice that the wall turns into a gray background signifying that it is now in <u>layout edit</u> mode.*
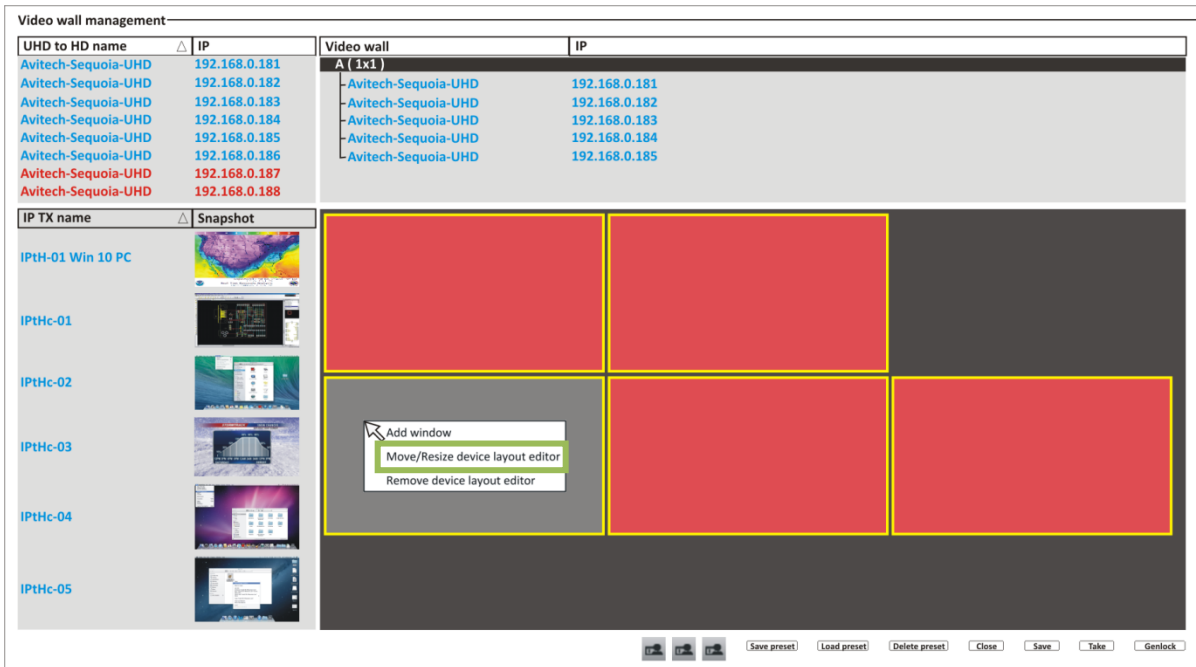
Figure 5-36 Wall in Layout Edit Mode

Step 3. *While the wall is in <u>layout edit</u> mode, use the mouse to drag on the side(s) of the wall to enlarge or shrink it (aspect ratio will always be maintained when dragging on any of the sides). You can also reposition by clicking and dragging anywhere within the wall.*
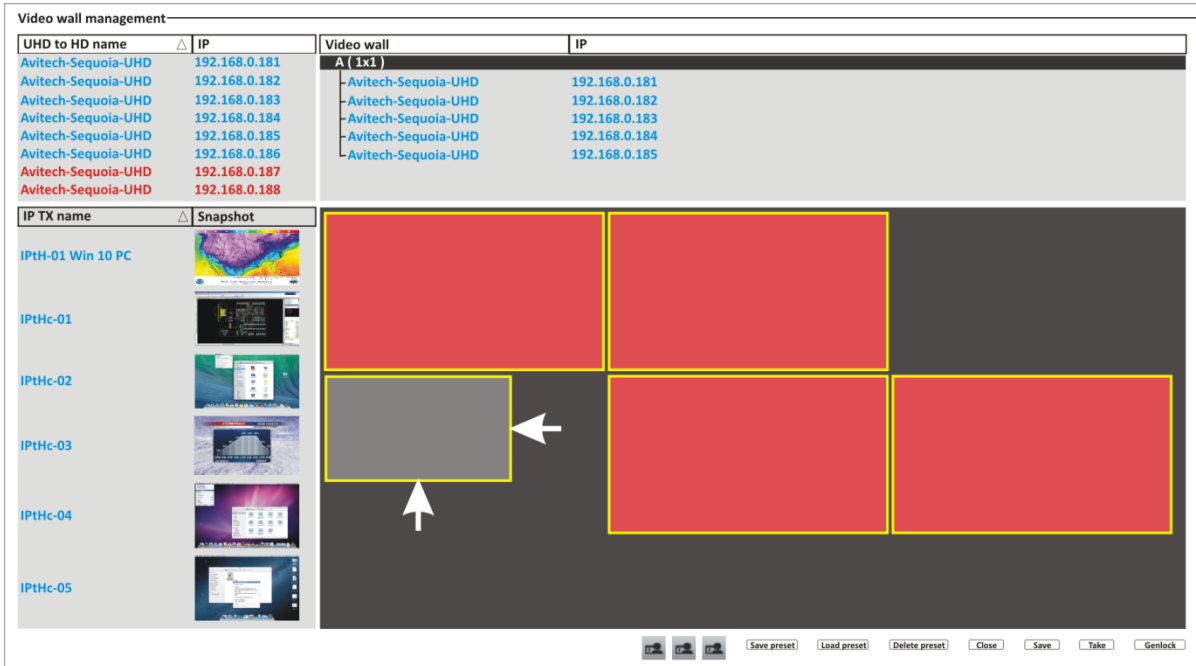
Figure 5-37 Resize the Lower Left Wall

Step 4. *Right-click the wall and click **Move/Resize device layout editor** (with checkmark) to exit <u>layout edit</u> mode for this wall. The wall will revert back to its original reddish background to signify that it is not in <u>layout edit</u> mode anymore.*
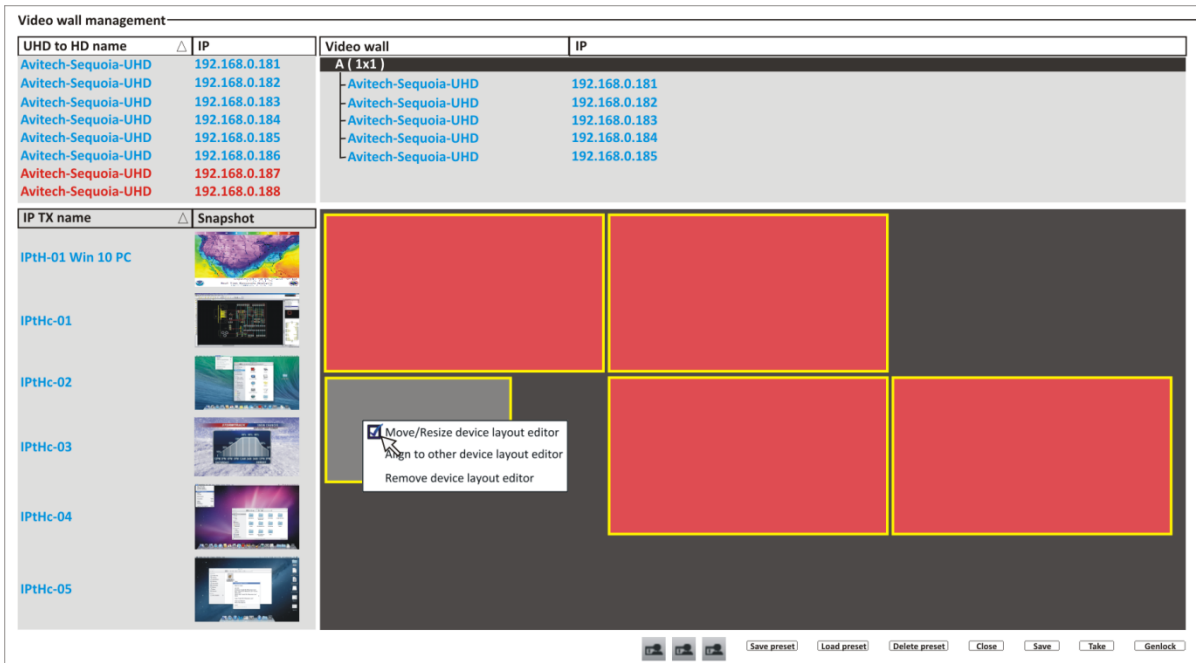
Figure 5-38 Exit the Layout Edit Mode

*Step 5. Right-click the lower middle wall and click the item **Move/Resize device layout editor**. Notice that the wall turns into a gray background signifying that it is now in <u>layout edit</u> mode.*
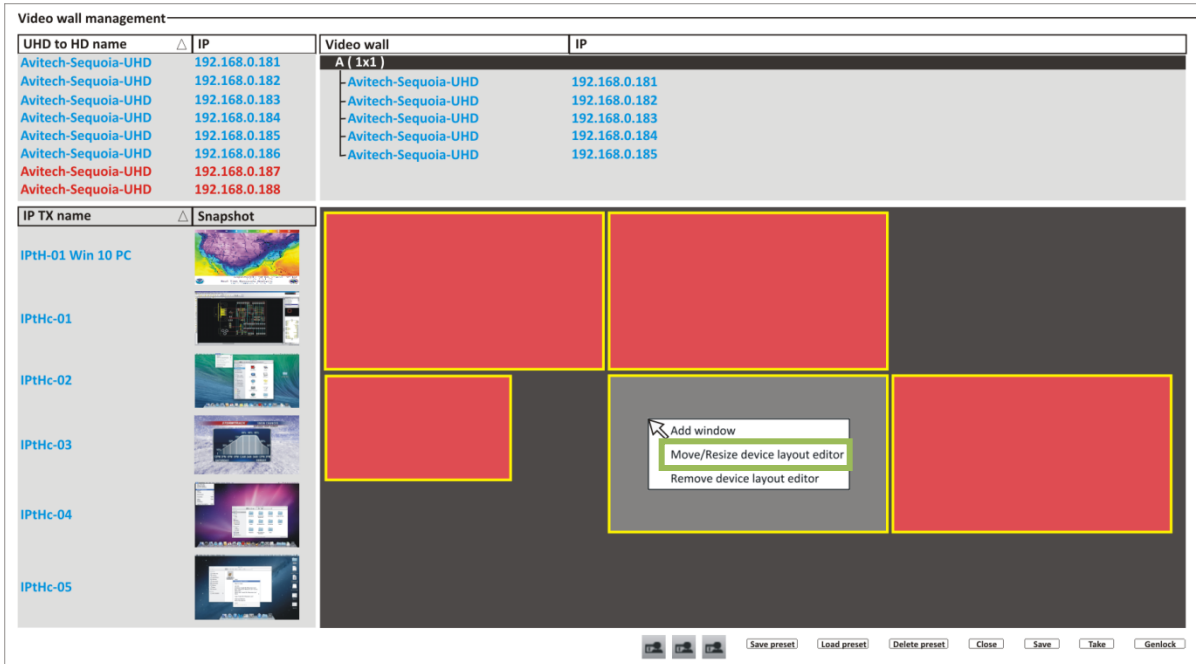
Figure 5-39 Wall in Layout Edit Mode

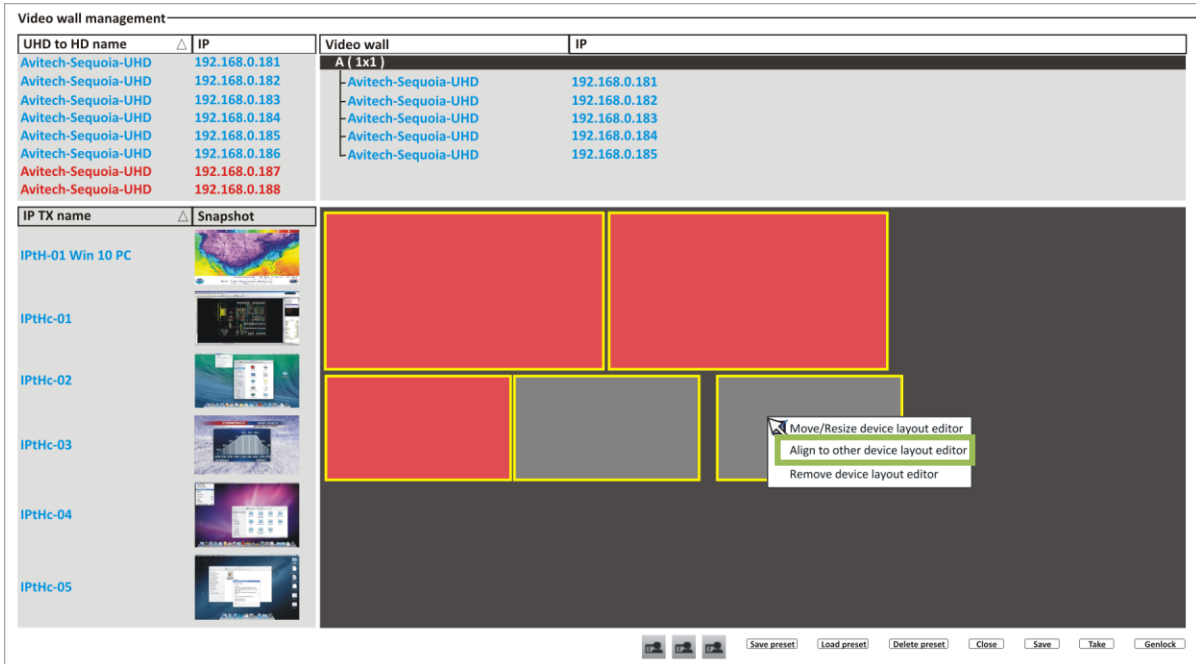*Step 6. Again, right-click the wall and click **Align to other device layout editor**.*
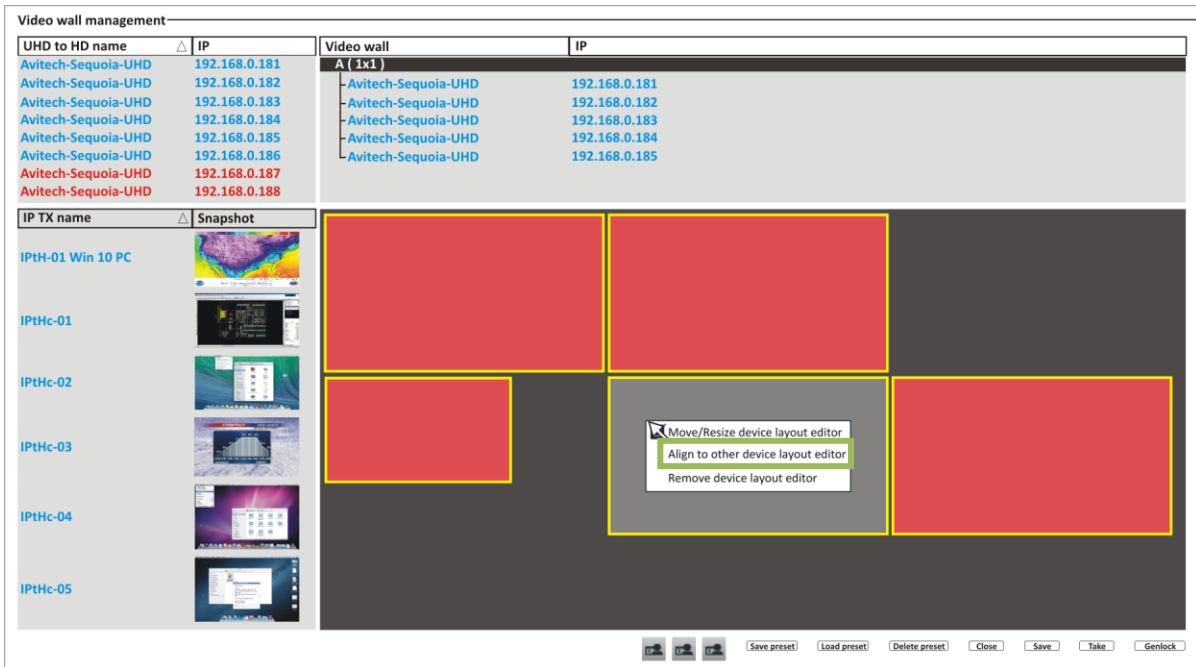
Figure 5-40 Click "Align to Other Device Layout Editor"

*Step 7. When the following window appears click **Align to size** to select it. Then click **OK**.*
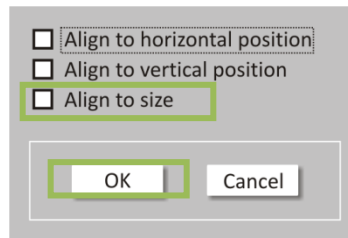
Figure 5-41 Click "Align to Size"

Step 8. Click the wall that you wish to follow its size (left wall). Notice that the wall will shrink to be the same size as the wall you copied from.
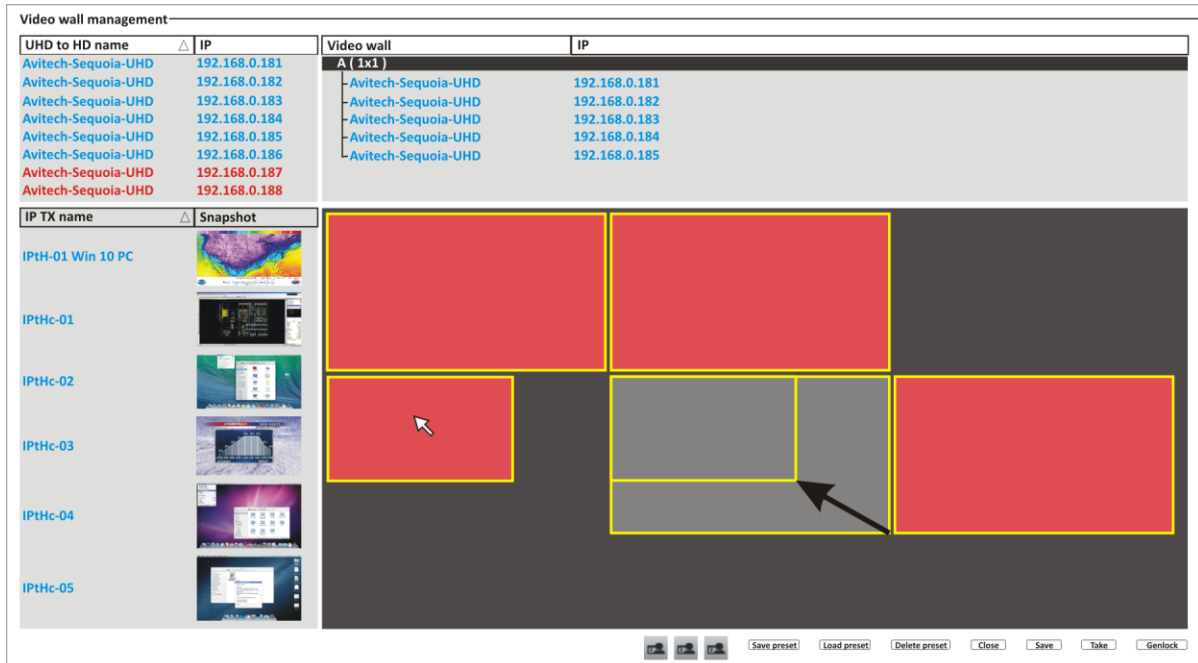
Figure 5-42 Wall Copy the Size

Step 9. Perform steps 5 ~ 8 for the lower rightmost wall.

Step 10. *With the middle and rightmost wall still in <u>layout edit</u> mode, use the mouse to drag both walls to its new position.*
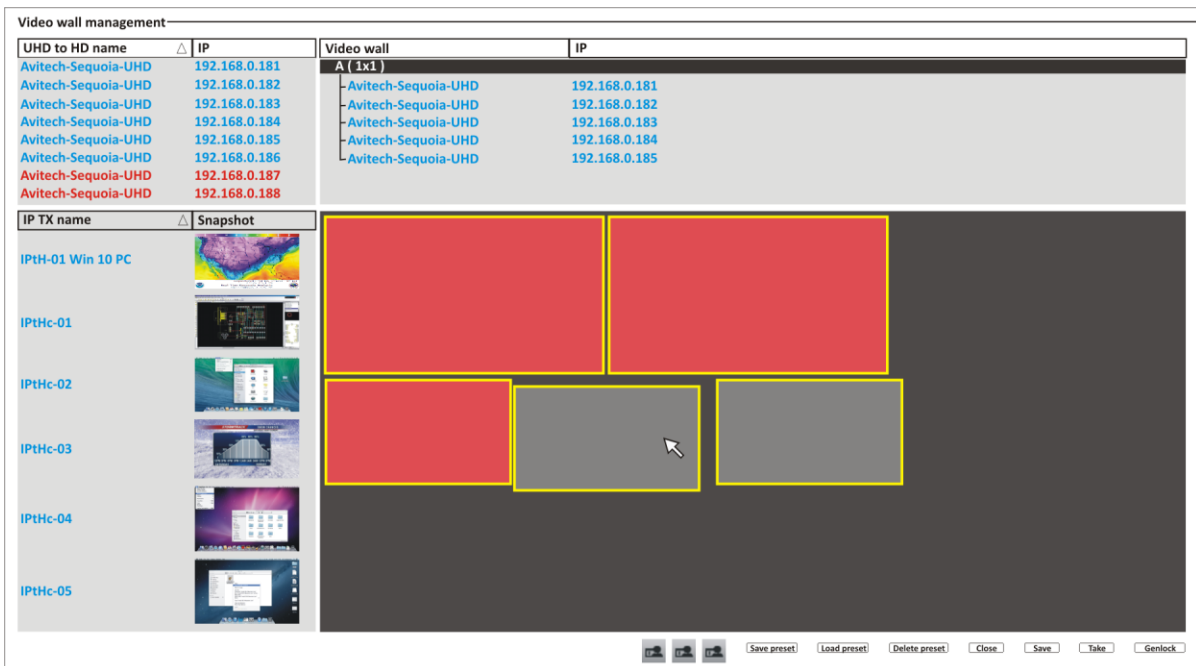
Figure 5-43 Middle and Rightmost Wall in New Position

Step 11. *To align the middle wall vertically with the leftmost wall, right-click it and select **Align to other device layout editor**.*
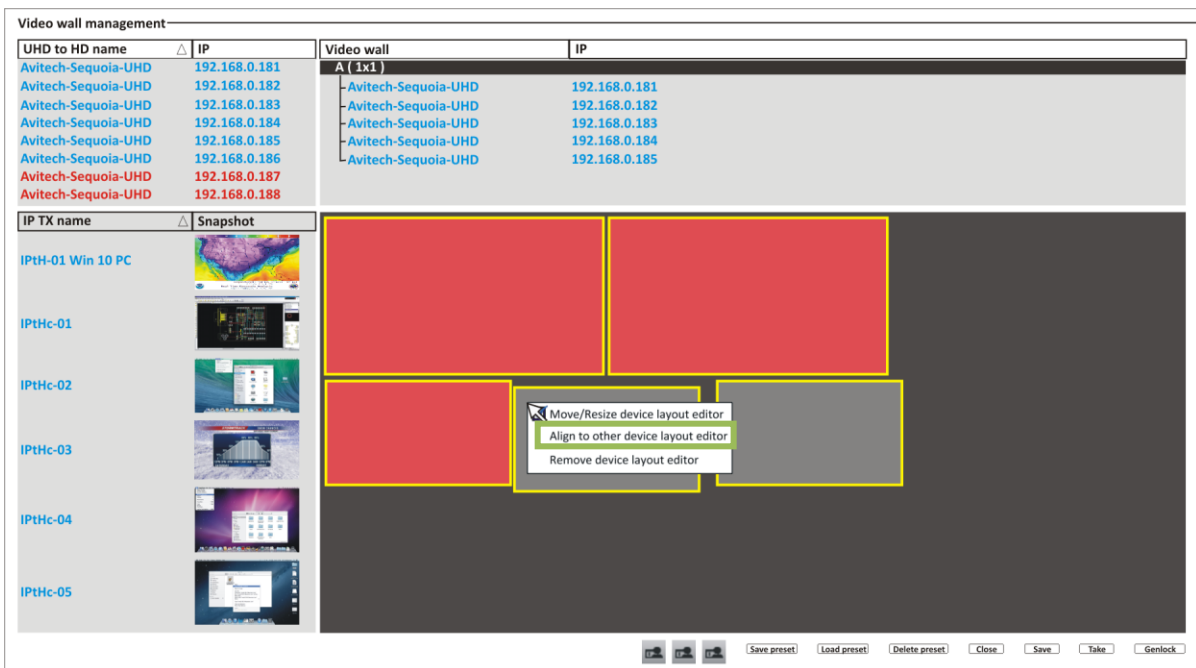
Figure 5-44 Click "Align to Other Device Layout Editor"

Step 12. *When the following window appears click **Align to vertical position** to select it. Then click **OK**.*
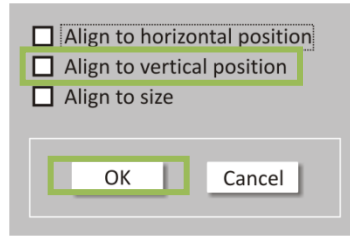
Figure 5-45 Click "Align to Vertical Position"

Step 13. *Click the wall that you wish to follow its size (left wall). Notice that the wall will move upwards to align with the wall you copied from.*
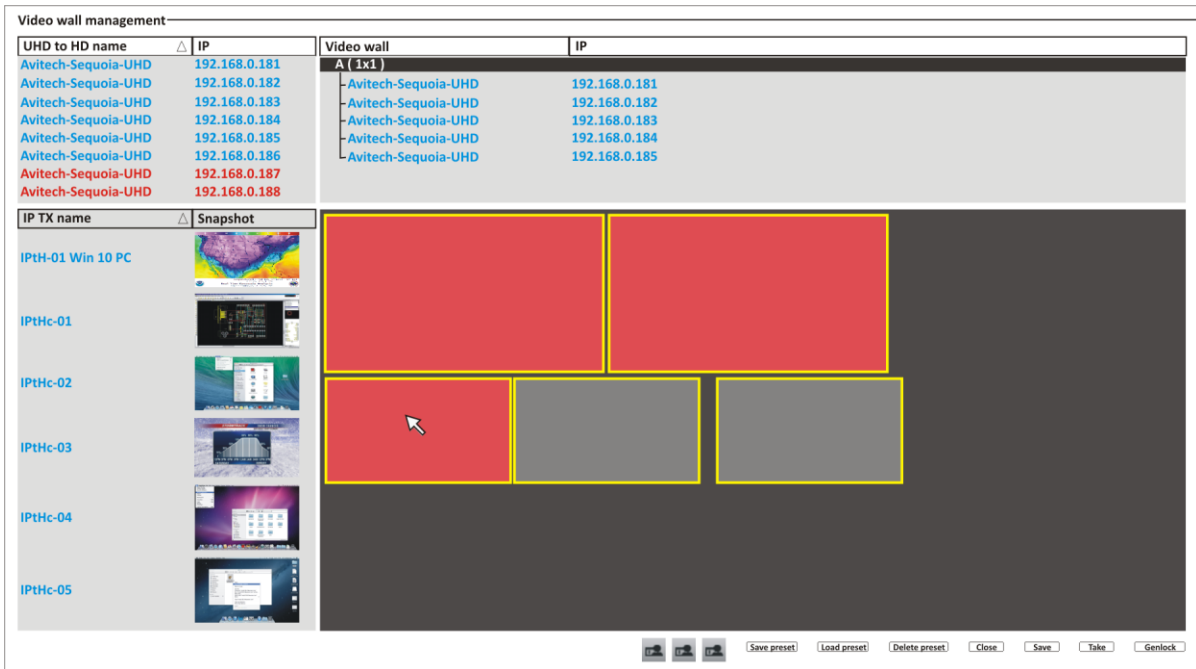
Figure 5-46 Wall Aligns Vertically

Step 14. To align the rightmost wall horizontally with the upper wall, right-click it and select **Align to other device layout editor**.

Figure 5-47 Click "Align to Other Device Layout Editor"

Step 15. When the following window appears click **Align to horizontal position** to select it. Then click **OK**.
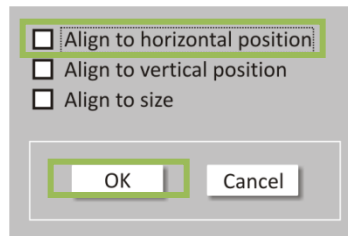
Figure 5-48 Click "Align to Horizontal Position"

Step 16. *Click the wall that you wish to follow its size (upper wall). Notice that the wall will move to the left to align with the wall you copied from.*
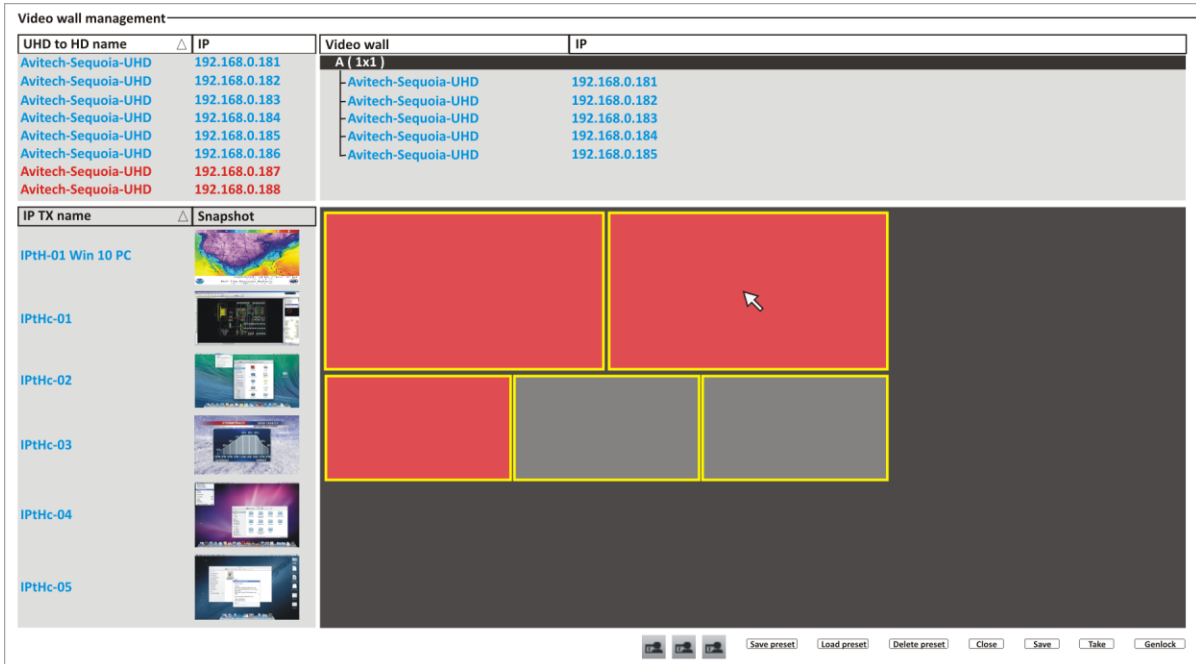
Figure 5-49 Wall Aligns Horizontally

Step 17. *Right-click the middle wall and click **Move/Resize device layout editor** (with checkmark) to exit layout edit mode for this wall. The wall will revert back to its original reddish background to signify that it is not in layout edit mode anymore.*
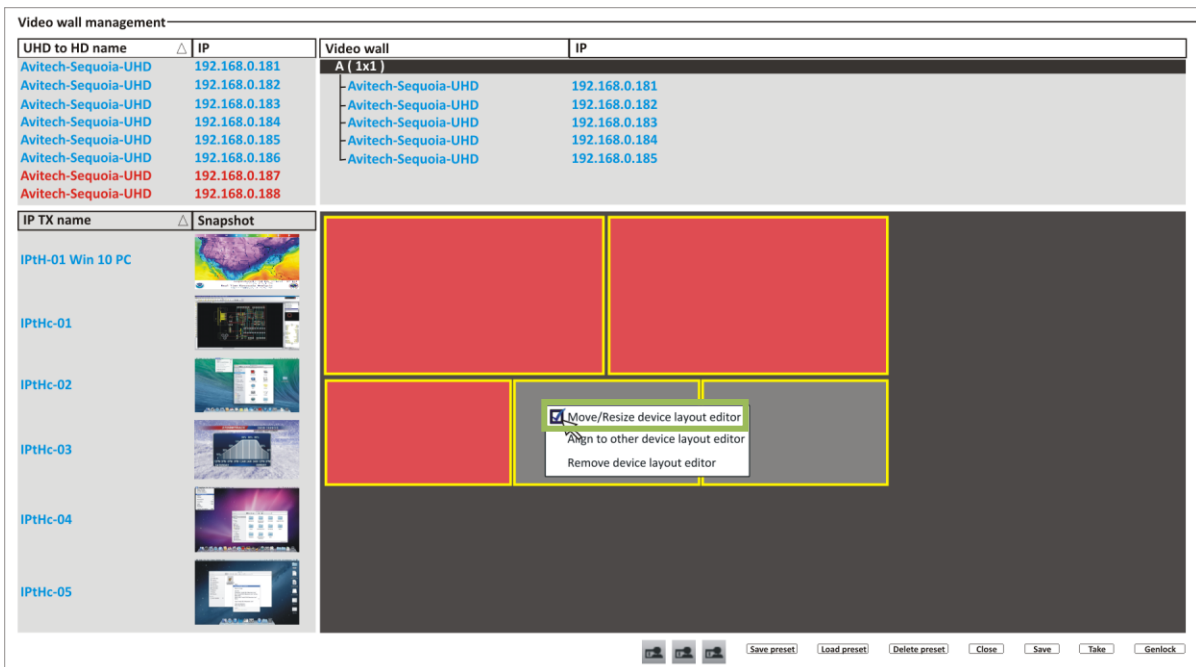
Figure 5-50 Exit the Layout Edit Mode

Step 18. *Perform the previous step to allow the rightmost wall to also exit layout edit mode. The wall will revert back to its original reddish background to signify that it is not in layout edit mode anymore.*

6. <u>Using the Touch-screen</u>

> *1. As of the writing of this manual only the Hatteland Display 4K touch-screen (model: HD 55T22 MVD-MAx-AOGx (wall mount)) has been tested with Sequoia UHD / UHD/T.*
> *2. The "Surfer" feature is not available with touch-screen function.*

The Sequoia UHD / UHD/T with touch-screen function always operate in one of its two operating modes: <u>Host</u> and <u>Remote</u> mode. Users are allowed to freely switch between these two modes anytime during the operation for different uses. This chapter discusses these operating modes with touch-screen function in detail.

<u>Host Mode</u>

When a window in Sequoia UHD / UHD/T with touch-screen function are in <u>Host</u> mode, a white border appears on the window. The cursor will be controlled by the tap of your finger on the window. <u>Host</u> mode provides a monitoring solution for the incoming computer/video signals. Users can use one/two/three fingers to select and adjust window size, position, and close window directly on the touch-screen. Other features such as the mouse right-click menu and the auto-hide menu are features of this mode that still needs to be accessed via the mouse connected to your Sequoia UHD / UHD/T (discussed in detail in chapter 4 and Appendix C).

<u>Remote Mode</u>

Upon double-tapping a multi-view window to allow it to enter <u>Remote</u> mode, notice that the window's border will turn "yellow", this signifies that your Sequoia UHD / UHD/T is now in <u>Remote</u> mode. Entering <u>Remote</u> mode, your Sequoia UHD transfer keyboard and mouse control to the selected computer system. You can then control the computer as you regularly would within the window on the display. Your Sequoia UHD / UHD/T can only enter <u>Remote</u> mode to take control of a computer when the correct USB type B port (**USB IN 1 ~ 4**) on your Sequoia UHD / UHD/T's rear panel is properly connected to the USB type A port of that computer (using a standard USB A/B cable). In addition, only windows corresponding to computer systems (as opposed to pure video systems) can be accessed through <u>Remote</u> mode.

<u>Tips on Navigating the Touch-screen Monitor Using the Sequoia UHD / UHD/T:</u>

❖ *A maximum of four computers can be connected to a single Sequoia UHD / UHD/T. The Sequoia UHD / UHD/T puts the images of four computers onto four windows and simultaneously displays them on the touch-screen monitor. Instant switching of inputs through the user interface using the mouse's right-click menu is supported; thus, any of the four computers can be monitored and controlled on the touch-screen display.*

❖ *When <u>Host</u> mode is active, use two fingers to resize, one finger to reposition, and three fingers to close window on the display. (Details in a latter portion of this chapter)*

❖ *To switch from <u>Host</u> mode to <u>Remote</u> mode, tap (approximately two seconds) the top-right corner of the targeted window and then click the **Enter remote mode** icon (or double-tap any area within that window).*

❖ *When entering <u>Remote</u> mode, your Sequoia UHD / UHD/T automatically transfers its keyboard and mouse control to the selected computer. Use your fingers to control that computer as you regularly would.*

❖ *To switch back to <u>Host</u> mode, tap-and-hold on the upper portion of that window or double-tap anywhere on non-window area of your display. The Sequoia UHD / UHD/T will return to <u>Host</u> mode. (Details in a latter portion of this chapter)*

6.1 Pop-up Selections

Use a finger to tap the top-right corner of a window for approximately two seconds, the following pop-up selections will appear:

Figure 6-1 Touch-screen: Pop-up Selections

📄 *The pop-up selections will also appear to signify a change of state from <u>Remote</u> mode to <u>Host</u> mode when using the tap-and-hold upper portion of window method.*

❖ 🔄 *Swap: enable a window to switch its position with the other window*

❖ 🖥 *Enter <u>Remote</u> mode: enter <u>Remote</u> operation mode and control the computer corresponding to the window*

❖ ⛶ *Full screen: set a window to full screen*

❖ ✛ *Restore: return from a full-screen view to previous layout*

❖ 🔊 *HDMI audio: embedded audio output in HDMI signal is enabled*

❖ 🔇 *HDMI audio: embedded audio output in HDMI signal is disabled*

❖ 🎧 *Headphone: audio output via headphone is enabled*

❖ 🎧 *Headphone: audio output via headphone is disabled*

📄 *When Sequoia UHD / UHD/T detects that a particular computer's USB port is not connected, the **Enter remote mode** 🖥 pop-up icon on the corresponding window will be grayed-out.*

6.1.2 Functions (multiview display)

The Sequoia UHD / UHD/T allow free window resize/reposition directly through the touch-screen. The following is a list of summarized functions available in <u>Host</u> mode; additional functions can be referred to chapter 4 in detail.

Function	
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 (depending on the size of a display you may need to use the index finger of both hands) to make a window bigger
Window repositioning	Use one finger to tap-and-drag a window to a desired position. A white border will appear as guide in positioning when the mouse right-click menu item "Window drag/resize preview frame" is enabled.
Close window	Use three fingers to tap-and-drag (pinch) inward to close a window
Window position swapping	Tap the top-right corner of a window for approximately two seconds; tap the 🔄 icon. Then tap anywhere within another window to swap two windows' including label's positions. The image/video size may change according to the two positions' former window size.
Full screen window	Tap the top-right corner of a window for approximately two seconds; tap the ⛶ icon and then the window will maximize to full screen. Alternatively tap the ✛ icon to return from full screen.

Function	
Access a remote computer	Tap the top-right corner of a window for approximately two seconds; tap the ▣ icon to enter <u>Remote</u> mode to the corresponding computer. The ▣ icon will be disabled if a window does not correspond to a computer system, or if the USB connection between the Sequoia UHD / UHD/T and the computer fails.
Enable/disable HDMI embedded audio	Tap the top-right corner of a window for approximately two seconds; tap the 🔇 (corresponds to red left tally ▰ as well as right-click menu item "**Audio routing** > **HDMI output** > **Mute**" enabled) icon to enable output of HDMI embedded audio of corresponding computer. Tap the 🔊 (corresponds to green left tally ▰ as well as right-click menu item "**Audio routing** > **HDMI output** > **Mute**" disabled) icon to disable output of HDMI embedded audio.
Enable/disable Headphone audio	Tap the top-right corner of a window for approximately two seconds; tap the 🎧 (corresponds to red right tally ▰ as well as right-click menu item "**Audio routing** > **Headphone** > **Mute**" enabled) icon to enable output of headphone audio of corresponding computer. Tap the 🎧 (corresponds to green right tally ▰ as well as right-click menu item "**Audio routing** > **Headphone** > **Mute**" disabled) icon to disable output of headphone audio.

Table 6-1 <u>Host</u> Mode Functions

6.2   Drop-down Auto-hide Menu

The drop-down auto-hide menu in the touch-screen display is a <u>Host</u> mode feature designed for ease of shifting between the three factory-default layouts, saving three preset layouts and recall, saving the latest display layout and recall, flipping the display, and opening/closing any of the four window(s). This menu is located at the top of the display and pops up upon dragging a finger downwards from the top-edge of the display. Simply click a particular icon to execute its function.

Figure 6-2 Touch-screen: Drop-down Auto-hide Menu With Functional Icons

- ❖ *The auto-hide menu contains 16 functional icons as indicated in the figure above.*

- ❖ *The first three icons* ▦ ▤ ▤ *allow you to select one of the factory-default layouts by clicking the corresponding icon, and can be used to alter your display layout even when the "lock" function is enabled.*

- ❖ *The next three icons each represent loading a saved preset 1/2/3. A preset is a file that contains user-configured layout with already-adjusted settings. Users can have multiple presets stored to the Sequoia UHD / UHD/T for future references, but only the three presets saved using the next three icons* ▤ ▤ ▤ *can be loaded from the drop-down auto-hide menu as shortcuts. Presets stored here can also be accessed by the mouse right-click menu. Switching between presets under the drop-down auto-hide menu can also be achieved when the "lock" function is enabled.*

   ▣ *: Load user-defined preset 1*

   ▣ *: Load user-defined preset 2*

   ▣ *: Load user-defined preset 3*

❖ *The next three icons each represent the action of saving the user-defined preset 1/2/3. Presets stored here can also be accessed by the mouse right-click menu.*

: Save user-defined preset 1

: Save user-defined preset 2

: Save user-defined preset 3

❖ *The next icon represents loading a saved "latest" preset. Only the preset saved using the next icon can be loaded from the drop-down auto-hide menu as shortcut. Preset stored here can also be accessed by the mouse right-click menu. Switching between presets under the drop-down auto-hide menu can also be achieved when the "lock" function is enabled.*

❖ *The next icon represents flipping the touch-screen display 180-degrees. Preset saved in this orientation will also be loaded this way. Flipping the touch-screen display can also be achieved when the "lock" function is enabled.*

❖ *The last four icons (window displayed state:) (hidden state:) each represent the four windows of your touch-screen display.*
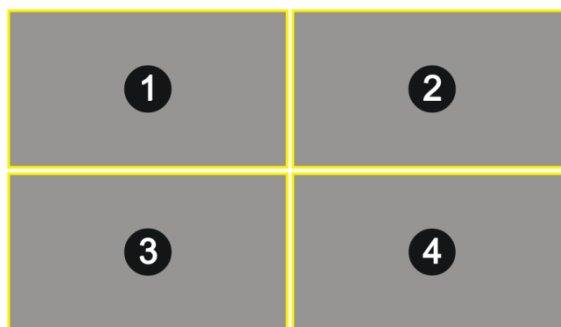
: Window 1 displayed (with right upper "x" mark). Clicking this icon will close window 1.

: Window 2 displayed (with right upper "x" mark). Clicking this icon will close window 2.

: Window 3 displayed (with right upper "x" mark). Clicking this icon will close window 3.

: Window 4 displayed (with right upper "x" mark). Clicking this icon will close window 4.

: Window 1 hidden. Clicking this icon will display window 1.

: Window 2 hidden. Clicking this icon will display window 2.

: Window 3 hidden. Clicking this icon will display window 3.

: Window 4 hidden. Clicking this icon will display window 4.

6.3   Lock/Unlock Window Layout

Some applications prefer fixed windows on the display. The only method to lock/unlock window layout is via the auto-hide menu using the mouse. This menu is located at the bottom of the display and pops up when the Host cursor using the mouse is nearby.

Figure 6-3 Auto-hide Menu With Lock/Unlock Window Layout Icon

❖ The **lock** 🔒 icon locks the current layout of the Sequoia UHD / UHD/T's display, and disables any adjustment of window size and position. In case when two or more windows overlay, the selected window will still come to the top-most layer of the display and the other one will fade into background. Other functions such as those on the pop-up selectio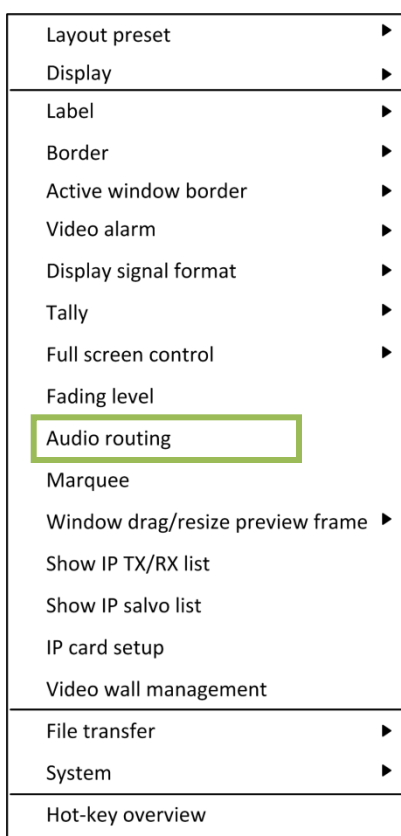ns and the mouse right-click menu are still available even when the "lock" function is enabled. To disable the "lock" function, click the **lock** 🔒 icon and it will change to the **unlock** 🔓 icon (the **unlock** icon replaces the **lock** icon when "lock" is disabled).

📄 *Upon moving the mouse cursor above the **lock** icon, it will show **Unlock** to prompt you to click it in order to unlock the current display layout. Alternatively, upon moving the mouse cursor above the **unlock** icon, it will show **Lock** to prompt you to click it in order to lock the current display layout.*

6.4   Audio Controls

To control the audio output on any window, use the mouse to access the right-click menu item **Audio routing** (see chapter 4 for detail).

| Layout preset	▶
Display	▶
Label	▶
Border	▶
Active window border	▶
Video alarm	▶
Display signal format	▶
Tally	▶
Full screen control	▶
Fading level	
Audio routing	
Marquee	
Window drag/resize preview frame	▶
Show IP TX/RX list	
Show IP salvo list	
IP card setup	
Video wall management	
File transfer	▶
System	▶
Hot-key overview	

Figure 6-4 Right-click Menu "Audio Routing"

6.5   Move/Resize/Close Window

A few simple gestures – tap, drag, and pinch – are all you need to use the touch-screen with Sequoia UHD.
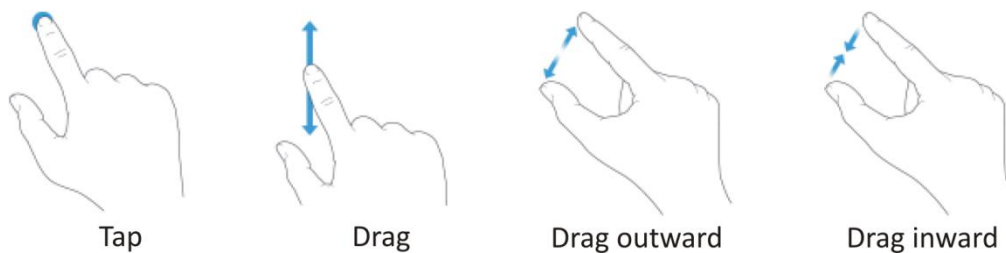
Figure 6-5 Using the Finger(s) to Tap and Drag

To move a window, press and hold your finger on a window, and then drag your finger to move the window.

Zoom out by placing two fingers apart on the touch-screen and then moving your finger together. Zoom in by placing two fingers together on the touch-screen and then moving your finger apart.

Close a window by placing three fingers apart on the touch-screen and then moving your finger together.

6.6   Exit from Remote Operation Mode to Host Operation Mode

To exit from <u>Remote</u> operation mode to <u>Host</u> operation mode, tap twice anywhere outside the "active" Remote window or tap-and-hold the upper part of the window for approximately 1.5 seconds.
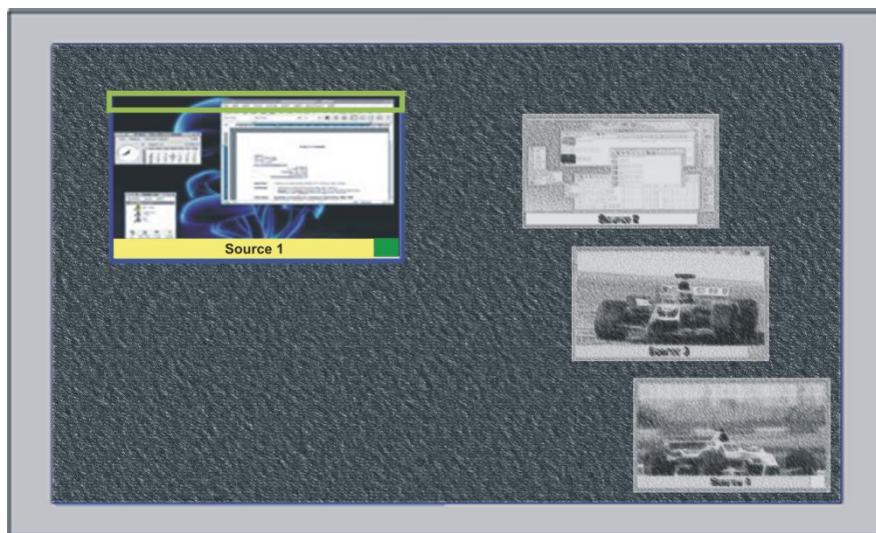
Tap and continue pressing on the area indicated by the green rectangle or tap twice anywhere outside Source 1 window

Figure 6-6 Touch-screen: Exit <u>Remote</u> Operation Mode

Tapping twice on any of the other window will just transfer keyboard and mouse control to that remote computer.

To exit from (full screen) <u>Remote</u> operation mode, tap the upper part of the touch-screen for approximately 1.5 seconds. The pop-up selections (upper right portion) will appear indicating that you are now back in <u>Host</u> mode. The below figure indicates the area with the green rectangle.

Tap and continue pressing on the upper area indicated by the green rectangle

Figure 6-7 Touch-screen: Exit <u>Remote</u> Operation Mode (When in Full Screen)

📄 *If in case a multi-view window was tapped-and-dragged using two fingers until it appears as a full screen window, the above method is still applicable. You can also tap-and-hold any of the four yellow borders until it disappears. This signifies that the full screen window is now in <u>Host</u> operation mode.*

6.7   <u>Switch Control (Cycle) Between Full Screen Windows</u>

To switch window (cycle) while in full screen <u>Remote</u> operation mode; press within an inch of the left or right edges of the touch-screen and hold for approximately 1.5 seconds.

- <u>Cycle Forward</u>: press **right** side of screen:
  window 1→window 2→window 3→window 4→window 1

- <u>Cycle Backward</u>: press **left** side of screen:
  window 1→window 4→window 3→window 2→window 1

Tap and continue pressing on the left or right areas indicated by the green rectangles

Figure 6-8 Touch-screen: Switch Windows while in Full Screen Mode

To allow the full screen window to display the label; select from any of the following steps:

- ✓ *Use the mouse to call up the right-click menu, then click **Label** > **Display label when full screen** > **On** (use this option on a selected window where you performed the mouse right-click action only).*

- ✓ *Use the mouse to call up the right-click menu, then click **Label** > **Display label when full screen** > **All on** (use this option on all the windows regardless of where you performed the mouse right-click action).*

Appendix A <u>Using the GO! Bridge Utility</u>

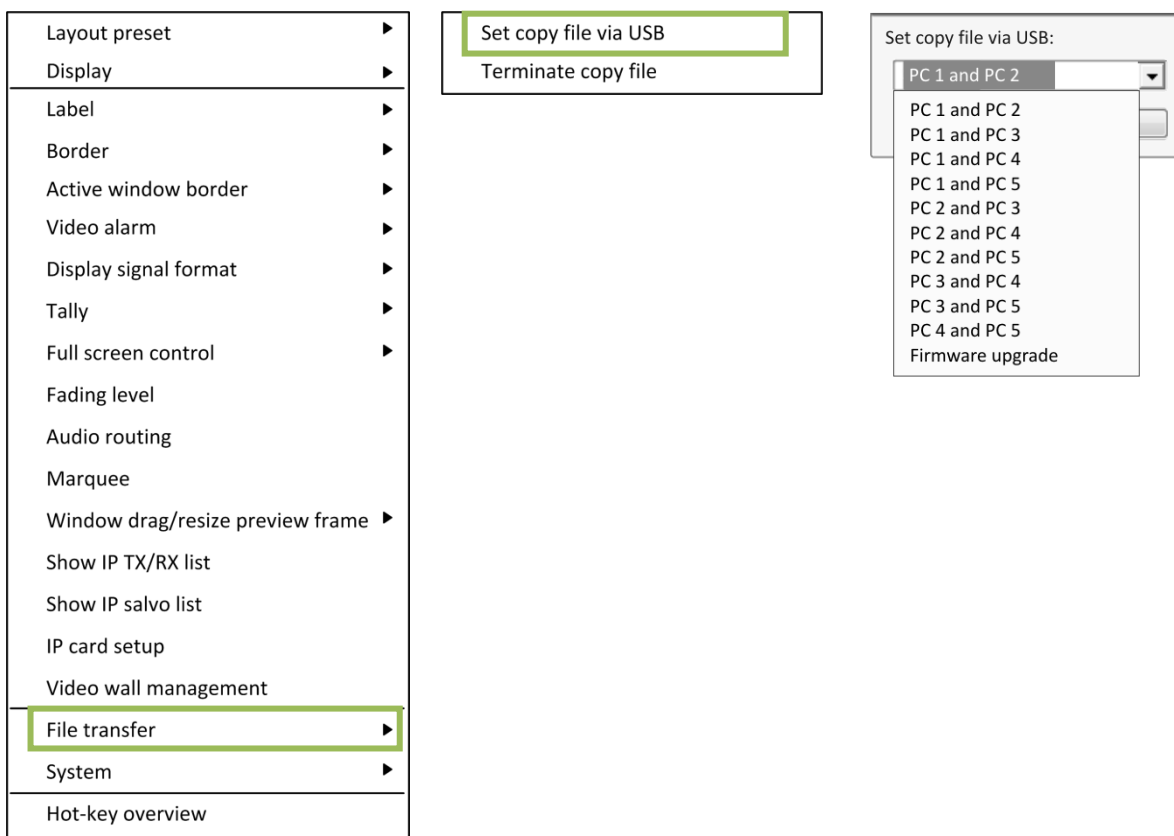*The GO! Bridge Utility is compatible with the following operating systems only:*
- *Microsoft Windows 2000 Professional / XP / Vista / Server 2003 / Server 2008 / Windows 7 / Windows 8 / Windows 10*
- *Mac (O/S X 10.5 or later version only)*

A single Sequoia UHD can connect up to four plus one computer systems. The Sequoia UHD puts the images of four computer systems and simultaneously displays them. Thus, any of the four connected computers can be displayed and controlled on a single monitor.

In addition to monitoring solutions, the Sequoia UHD also features file and folder transfer across the connected four plus one computers. This appendix introduces the GO! Bridge Utility – a handy feature not only for browsing files and folders contained in the hard drives of the connected computers, but also for copying-and-pasting or dragging-and-dropping these in order to better manage and transfer files and folders across computers.

The following steps show how to start up GO! Suite to use the GO! Bridge Utility:

Step 1. *Using the right-click menu, click* **File transfer** > **Set copy file via USB**. *Then select which of the two computers will file(s)/folder(s) transfer occur.* **PC 1** *corresponds to the USB connection of computer 1 (***Image 1***),* **PC 2** *corresponds to the USB connection of computer 2 (***Image 2***) and so forth.*

Layout preset	▶
Display	▶
Label	▶
Border	▶
Active window border	▶
Video alarm	▶
Display signal format	▶
Tally	▶
Full screen control	▶
Fading level	
Audio routing	
Marquee	
Window drag/resize preview frame	▶
Show IP TX/RX list	
Show IP salvo list	
IP card setup	
Video wall management	
File transfer	▶
System	▶
Hot-key overview	

Set copy file via USB
Terminate copy file

Set copy file via USB:

PC 1 and PC 2 ▼

PC 1 and PC 2
PC 1 and PC 3
PC 1 and PC 4
PC 1 and PC 5
PC 2 and PC 3
PC 2 and PC 4
PC 2 and PC 5
PC 3 and PC 4
PC 3 and PC 5
PC 4 and PC 5
Firmware upgrade

Figure A-1 Click **File transfer** > **Set copy file via USB** > Select the Two USB Ports for Pairing

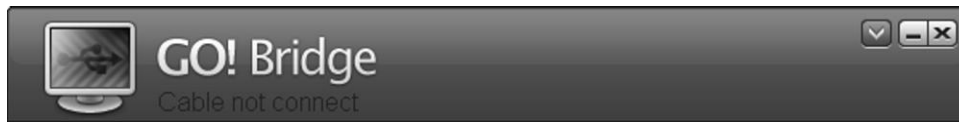*The following image will briefly appear onscreen.*


Figure A-2 GO! Bridge Initialization

📄 *Go! Bridge Utility will not be executed automatically under Windows 7 / Windows 8 / Windows 10 operating systems; click* **Run GSLoader.exe** *to continue when either or both computers display the below window.*


📄 *Likewise, the Go! Bridge Utility will not be executed automatically under Mac operating system, double-click the* **GO! Suite** *icon when either or both computers display it.*

When the next window appears, double-click the **GO! Bridge** *icon.*
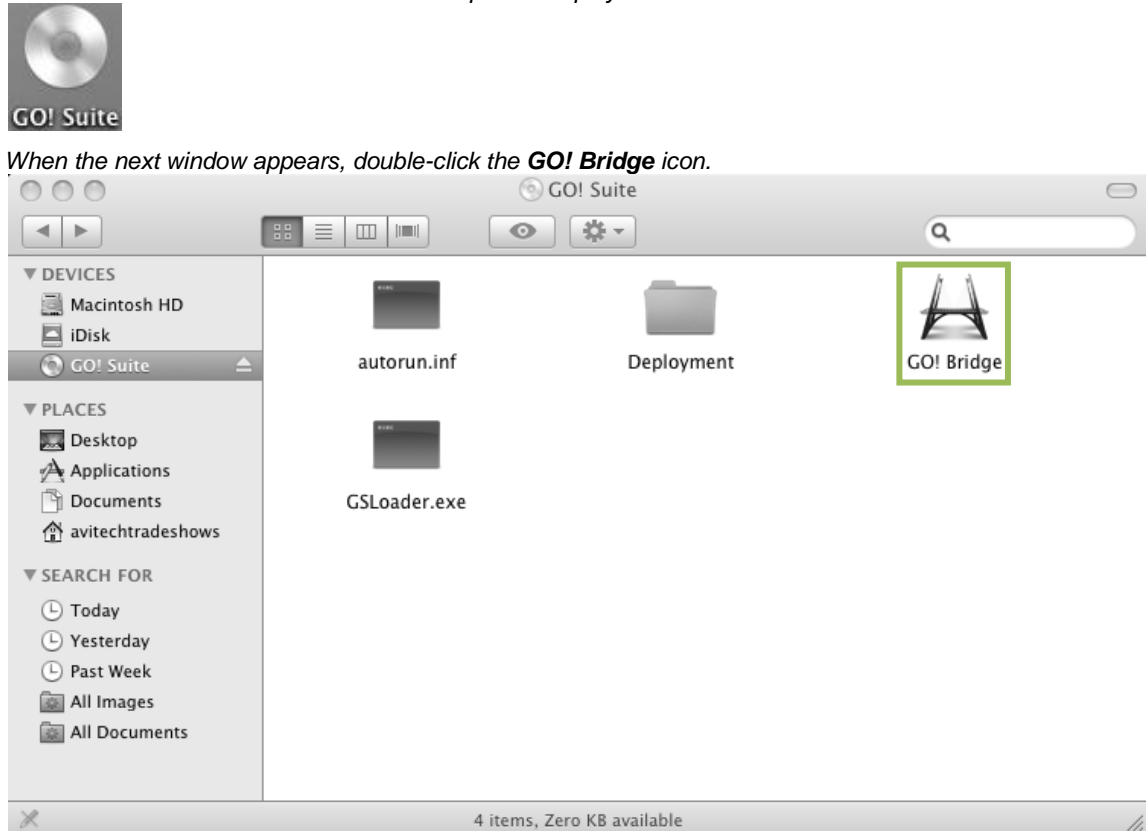
*The computers will start recognizing the USB connection. When initialization is complete, the next sample screen will appear showing the **Desktop** content of the first computer on its corresponding window. A similar window as figure A-3 below will also be displayed on the paired computer's window, showing the **Desktop** content of the second computer. A "bridge" between the two computers is now established allowing transfer (copy/paste) of files and folders through the Sequoia UHD.*
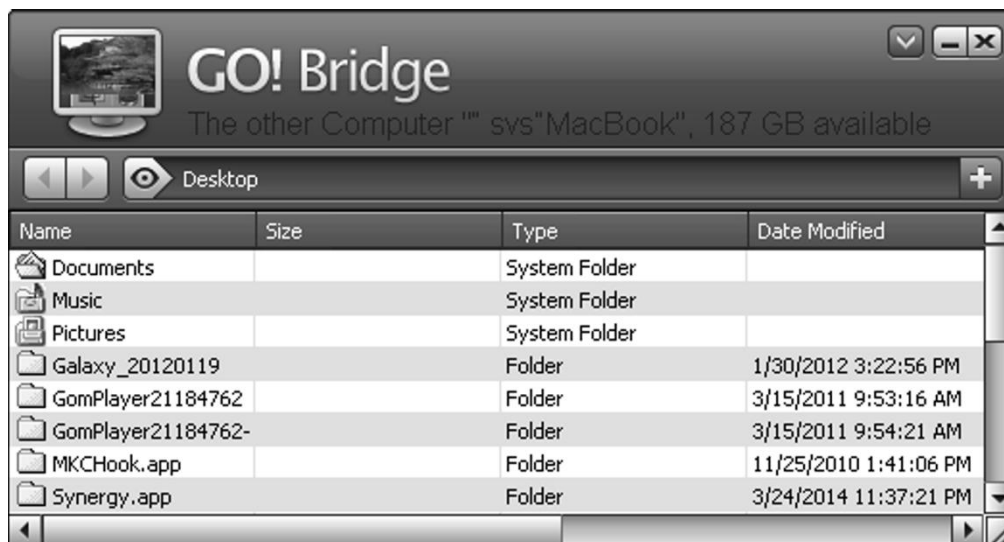
Figure A-3 Sample GO! Bridge Desktop Content (Windows Operating System) in Main Panel
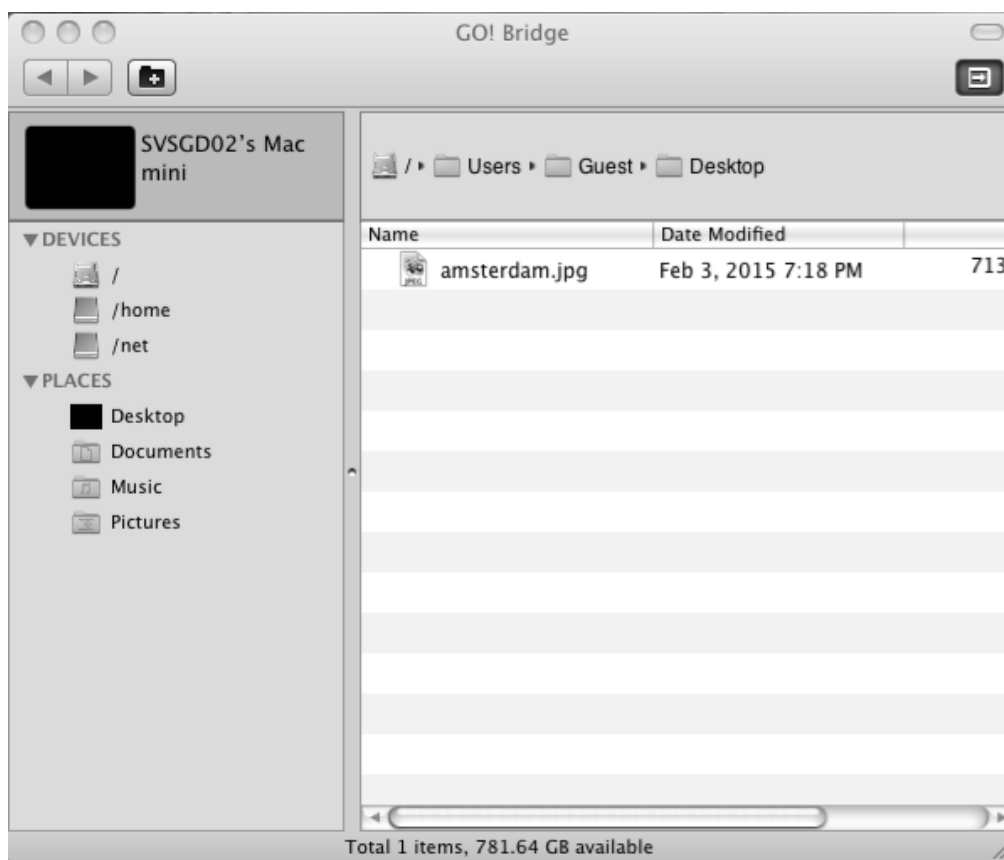
Figure A-4 Sample GO! Bridge Desktop Content (Mac Operating System) in Main Panel

About GO!Bridge
Always On Top
Open Dock

Step 2. For Windows XP / 7 / 8 / 10, click this icon   *(for Mac OS click ▣) on the top-right corner of the Go! Bridge's interface, and then select **Open Dock** to open up the **Dock** panel as shown below. Multiple files/folders can be placed onto the **Dock** panel so that those destined for the same destination can be transferred at the same time.*
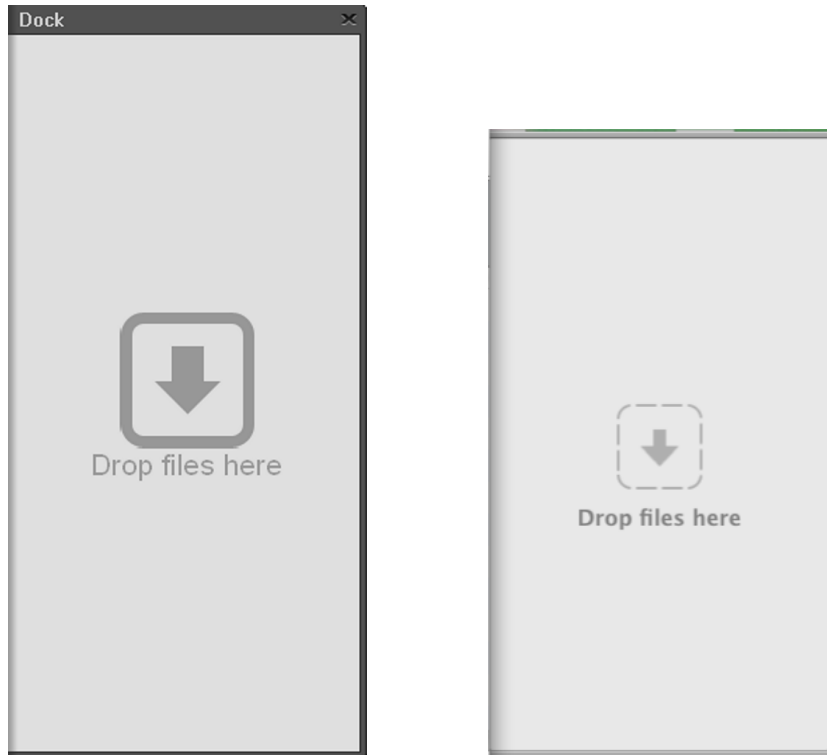
Dock ✕

Drop files here

Drop files here

Figure A-5 Dock Panel for Windows (left) and Mac (right) Operating Systems

*Step 3. To manage files or folders on the Go! Bridge's main panel, or add them to the **Dock** panel, right-click the desired file or folder on the main panel, and then on the pop-up menu, select any of the following:*

❖ **Open** *– open the selected file/folder (can also double-click it).*
<u>Note</u>: *Some executable files (".exe") that require other supporting files such as graphic resources, library, etc., may not run on the remote computer.*

❖ **Add to Dock** *– add the selected file/folder to the **Dock** panel (can also drag-and-drop to the **Dock** panel)*

❖ **Rename** *– change the name of a selected file/folder.*

❖ **Copy** *– copy the selected file/folder to paste to another destination. After copying the file/ folder, select the next item:*

❖ **Paste** *– complete the file/folder transfer by pasting the file/folder to the desired destination.*
<u>Note</u>: *Pasting to the same destination as the source location or pasting to the same computer is not allowed.*

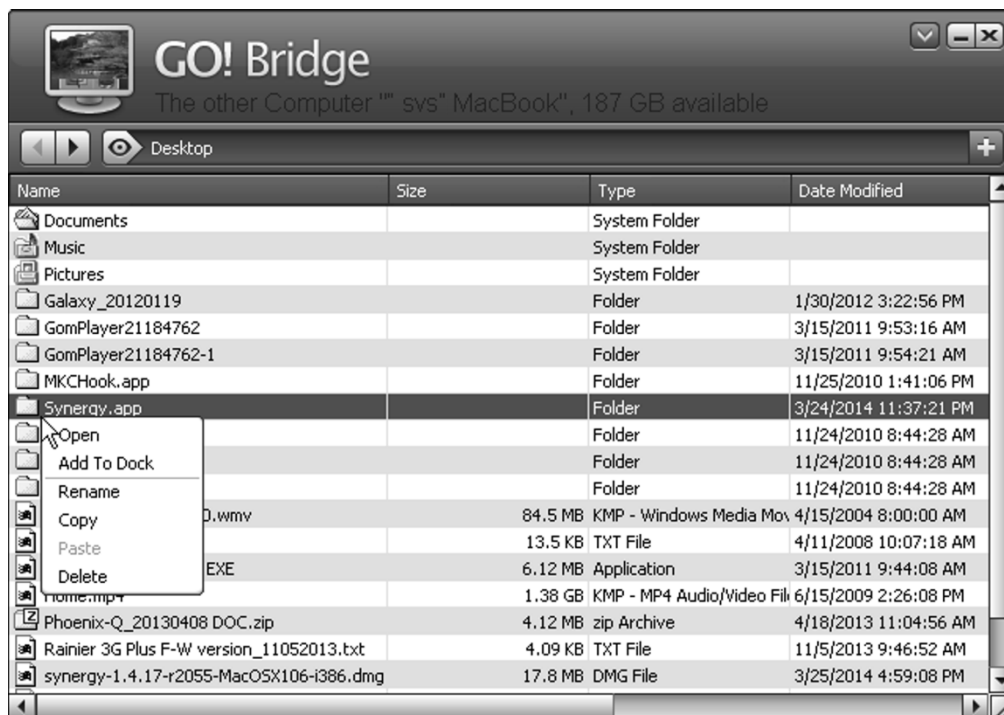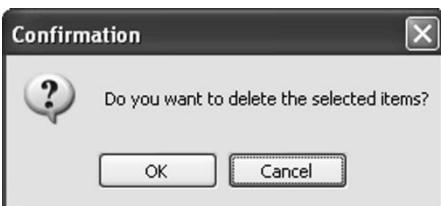❖ **Delete** – *remove the file/folder from the list. Click* **OK** *to confirm.*

Figure A-6 Right-click File/Folder Menu on Main Panel

Step 4. To manage files or folders added to the **Dock** *panel, right-click the desired file or folder on the* **Dock** *panel, and then in the pop-up menu, select any of the following:*

❖ **Copy** – *copy the selected file/folder to paste to another destination. After copying the file/ folder, select*

❖ **Paste** – *complete the file/folder transfer by pasting the file/folder to the desired destination (i.e. on your* **Desktop***).*

❖ **Remove from Dock** – *remove the selected file/folder from the* **Dock** *panel.*

❖ **Select All** – *select all the files/folders on the* **Dock** *panel. This will make the transfer much easier if all the files/folders are to be moved to the same destination; perform copy-and-paste to the selected files/folders or simply drag-and-drop them to the desired destination (i.e. on your* **Desktop***).*
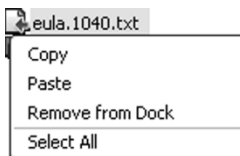

Figure A-7 Right-click File/Folder Menu on **Dock** Panel

📄 *Click the **view** icon as shown below to bring up the list of the default directory, the devices of the other computer, and recent path(s) previously browsed.*
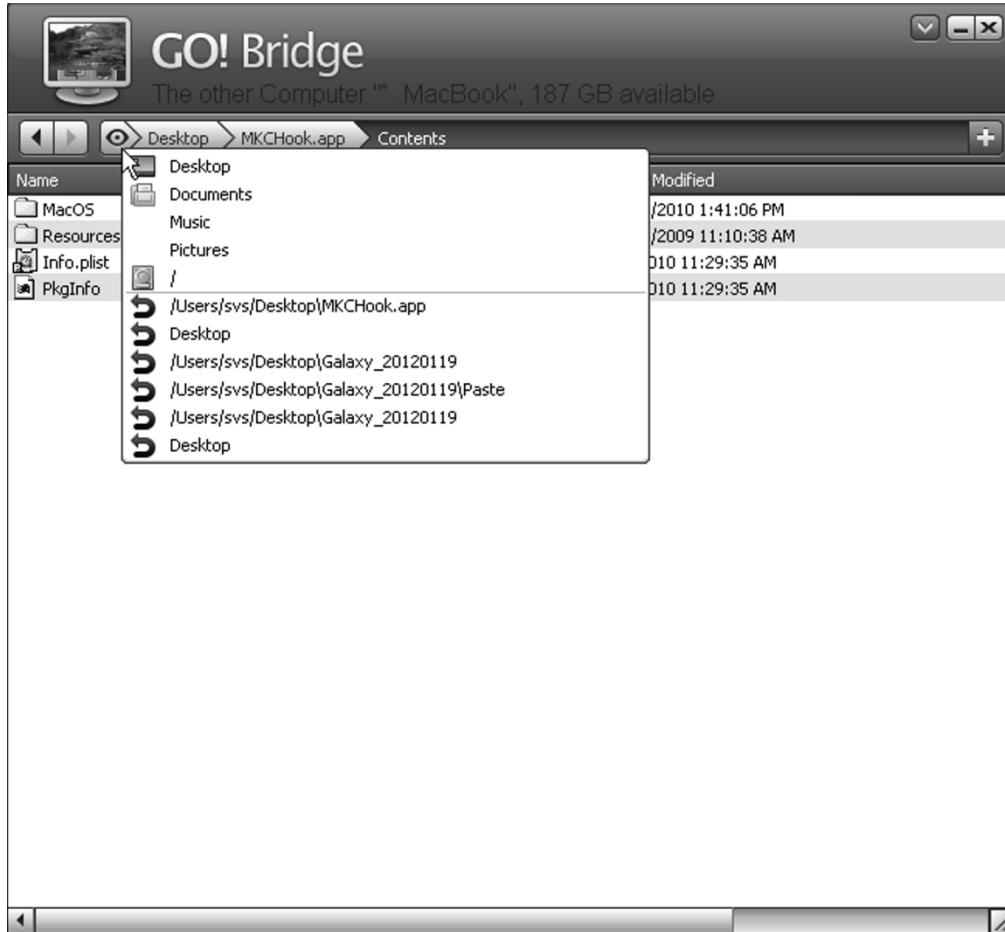

Figure A-8 View Button

📄 | *Click the **add folder** icon as shown below to add a new folder to the present directory of the other computer. You can also designate the name of the new folder (🖼 on the upper left of Mac OS main panel).*
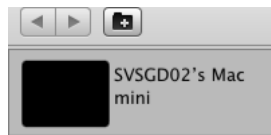

Figure A-9 Add New Folder and Designate the Name

📄 | *Click the* 🖼 *** monitor** icon to switch from the main panel display (<u>window</u> mode) to <u>icon</u> mode. In <u>icon</u> mode, dragging the file/folder(s) from the host computer onto the Go! Bridge icon transfers them only to the root directory of the other computer.*

Click the 🖼 *** monitor** icon again to switch back to the main panel display (<u>window</u> mode).*

Click the 🖼 *** monitor** icon in Mac OS to do likewise.*

Appendix B Using the "Surfer" Feature

1. The "Surfer" feature is available when using the following operating systems only:
- *Microsoft Windows 2000 Professional / XP / Vista / Server 2003 / Server 2008 / Windows 7 / Windows 8 / Windows 10*
- *Mac (O/S X 10.5 or later version only)*

*2. When "Surfer" feature is not supported by your operating system, use the **Ctrl** + **Shift** + **Alt** + **F10** hot-keys to toggle "Surfer" mode "off" and use other appropriate hot-keys as necessary (see chapter 3 for details on using hot-keys in Remote mode).*

The "Surfer" feature is designed for ease of switching the Sequoia UHD's keyboard and mouse control from one remote computer to another. When under non-full-screen Remote mode, simply move the cursor from the current window toward the nearest edge(s) of the other window. The Sequoia UHD's keyboard and mouse control will automatically be transferred to the computer corresponding to that window when the mouse cursor leaves the former window to the latter one. This appendix discusses different "Surfer" scenarios for single Sequoia UHD setup. It should be noted that "Surfer" is a Remote mode feature, and the following scenarios presume that your Sequoia UHD is in Remote mode.

*By default, the "Surfer" feature is enabled upon starting up the Sequoia UHD. Notice that the window's border will turn "yellow" (default), this signifies that your Sequoia UHD is now in Remote mode with "Surfer" function. The **Ctrl** + **Shift** + **Alt** + **F10** hot-keys allow you to toggle "Surfer" feature on and off. You will need to turn it off in order to transfer control to the next computer hosting a Linux / Android / embedded O/S. Notice that the window's border will turn "red" (default), this signifies that your Sequoia UHD is now in Remote mode without "Surfer" function.*

*To transfer control to the next computer, press **Ctrl** + **Pause/Break** hot-key (i.e. Computer 1 → Computer 2 → Computer 3 → Computer 4 → Computer 1).*

*Or, press **Shift** + **Pause/Break** hot-key (i.e. Computer 1 → Computer 4 → Computer 3 → Computer 2 → Computer 1).*

B.1 "Surfer" Feature on Uniform Quad Layout That Fills Entire Screen

❖ *Below figure shows the "Image" window control switching action upon moving the mouse to the window side. Moving the mouse from one "Image" window to another transfers control from the former window to the target window.*
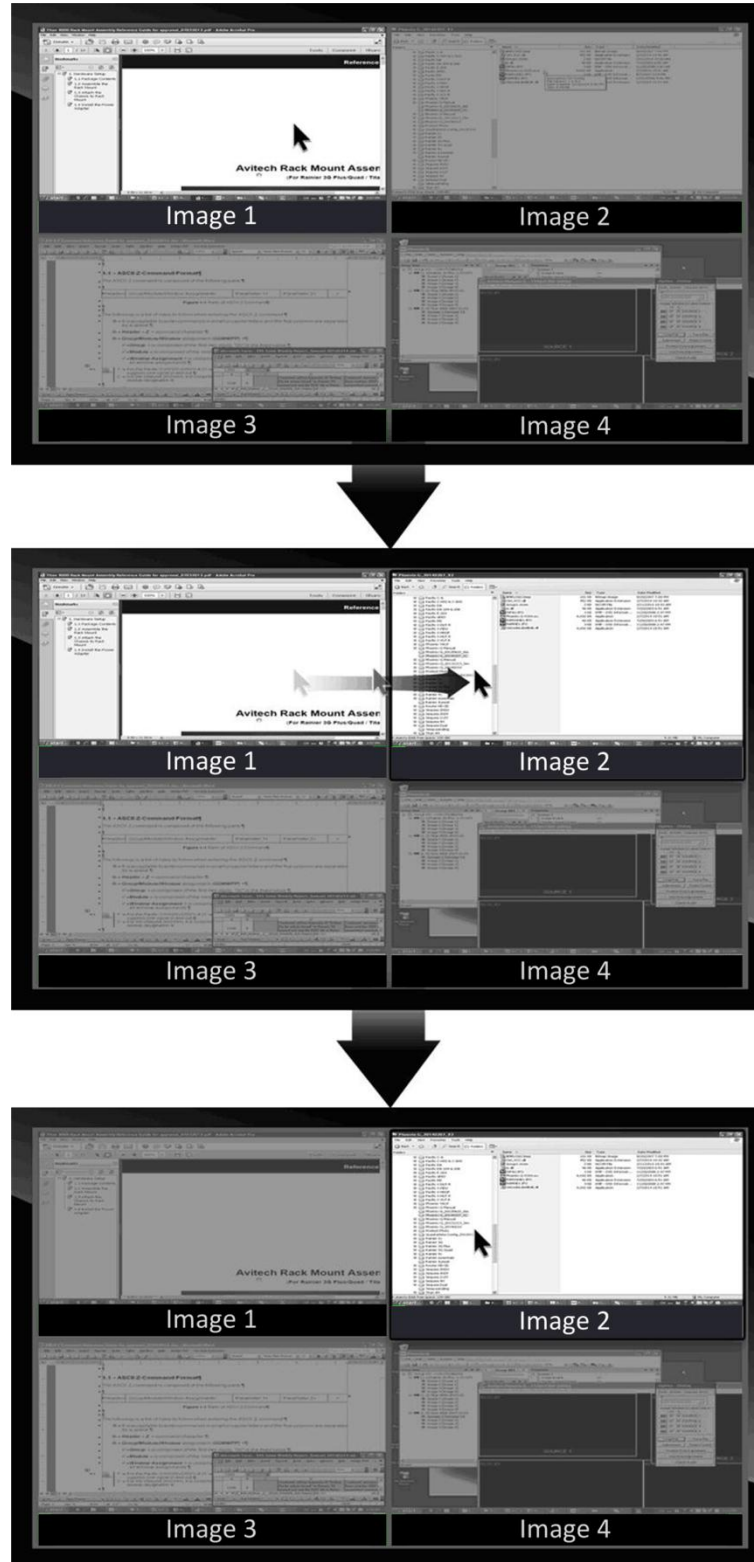

Figure B-1 "Surfer" Feature on Uniform Quad Layout

❖ *Below figure shows the allowed "Image" window control switching action upon moving the mouse to the window sides. Moving the mouse from one "Image" window to another transfers control from the former window to the target window.*
No "Image" window control switching action will occur upon moving the mouse to the outer borders of the screen.
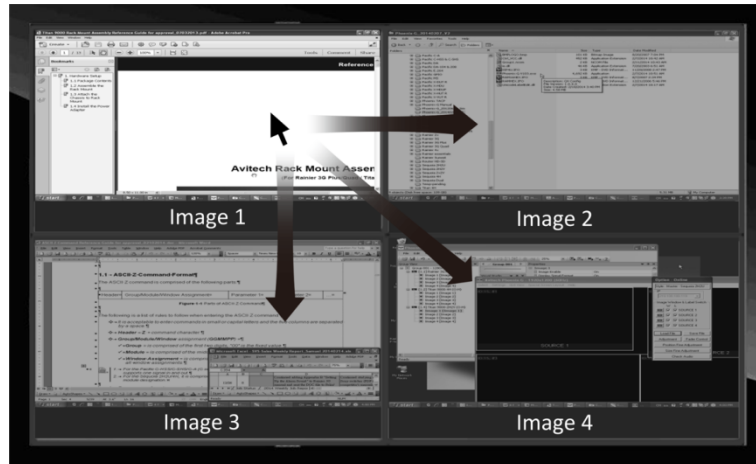

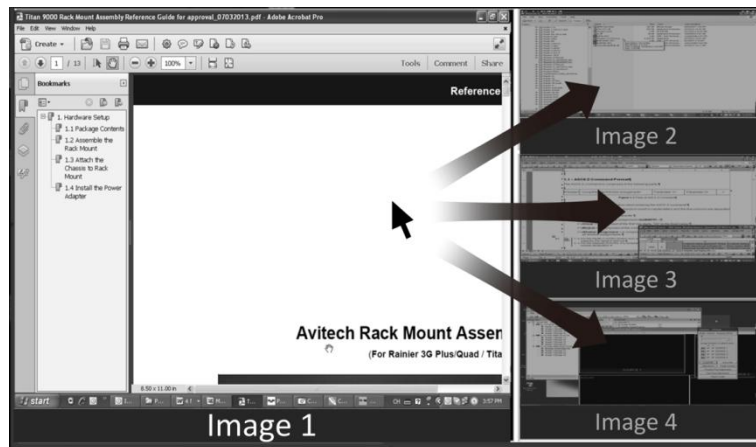**Figure B-2** "Surfer" Feature on Default Preset 1

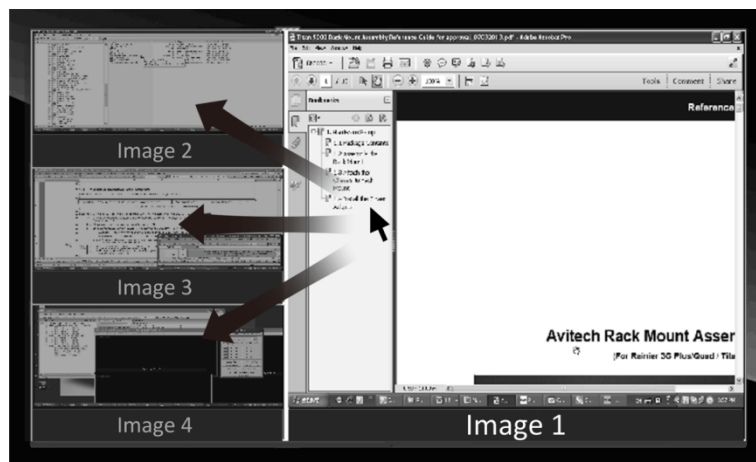**Figure B-3** "Surfer" Feature on Default Preset 2

Figure B-4 "Surfer" Feature on Default Preset 3

B.2 "Surfer" Feature on Non-adjoining Quad Layout

❖ *Below figure shows possible "Image" window control switching actions. Moving the mouse from one "Image" window to the other transfers control from the former window to the target window. No "Image" window control switching action will occur upon moving the mouse to the window sides without arrow.*
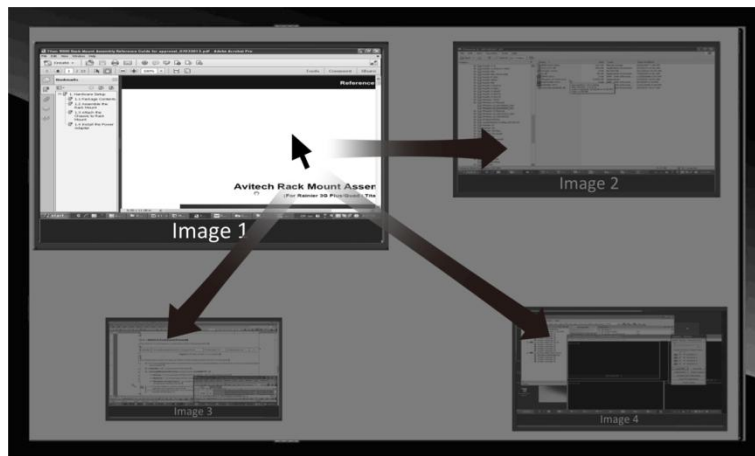

Figure B-5 "Surfer" Feature on Non-uniform, Non-adjoining Quad Layout

📄 *In the case of an image window overlay with another one, switching of control will occur when the mouse cursor has left the area where the two windows overlay (towards the targeted window).*

B.3 "Surfer" Feature on Full Screen "Image" Window

B.3.1 "Image" Window Control Switching

❖ *Below figure shows possible "Image" window control switching action upon pressing the **Shift** key plus moving the mouse to the sides of the window. Moving the mouse from one "Image" window to the next transfers control from the former window to the latter one.*
*No "Image" window control switching action will occur when moving the mouse to the top and bottom of the window, as well as moving the mouse to the left and right sides of the window without pressing the **Shift** key.*
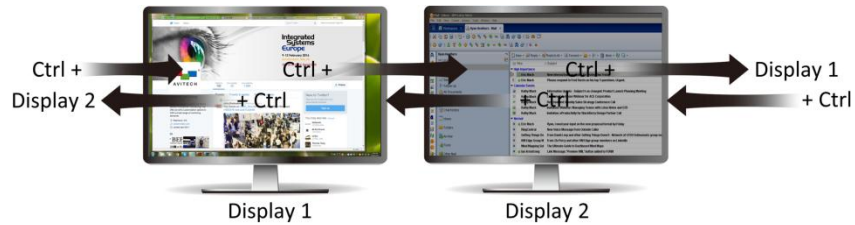

Figure B-6 "Surfer" Feature on Full Screen Source Window

B.3.2 Monitor Control Switching (Dual Display Setup)

❖ *Below figure shows possible monitor control switching action upon pressing the **Ctrl** key plus moving the mouse to the sides of the full screen display monitors. Moving the mouse from one full screen monitor to the next transfers control from the former display monitor to the latter one. No full screen monitor control switching action will occur when moving the mouse to the top and bottom of the window, as well as moving the mouse to the left and right sides of the full screen monitor without pressing the **Ctrl** key.*

Figure B-7 "Surfer" Feature on Dual Full Screen Display Monitors

Appendix C Using the Auto-hide Menu

The auto-hide menu is a <u>Host</u> mode feature designed for ease of shifting between the three factory-default layouts and three saved presets. It also has the "lock" function to suit applications that prefer fixed windows on the display. This menu is located at the bottom of the display and pops up when the <u>Host</u> cursor is nearby. Simply click a particular icon to execute its function.

Figure C-1 Auto-hide Menu With Functional Icons

❖ *The auto-hide menu contains seven functional icons as indicated in the figure above (not including the **Menu** icon).*

❖ *The **lock** 🔒 icon locks the current layout of the Sequoia UHD's display, and disables any adjustment of window size and position made by the <u>Host</u> cursor. In case when two or more windows overlay, the selected window will still come to the top-most layer of the display and the other one will fade into background. Other functions such as those on the pop-up selections and the mouse right-click menu are still available even when the "lock" function is enabled. To disable the "lock" function, click the **lock** 🔒 icon and it will change to the **unlock** 🔓 icon (the **unlock** icon replaces the **lock** icon when "lock" is disabled).*

📄 *Upon moving the mouse cursor above the **lock** icon, it will show **Unlock** to prompt you to click it in order to unlock the current display layout. Alternatively, upon moving the mouse cursor above the **unlock** icon, it will show **Lock** to prompt you to click it in order to lock the current display layout.*

❖ *The next three icons allow you to select one of the factory-default layouts by clicking the corresponding icon, and can be used to alter your display layout even when the "lock" function is enabled.*

❖ *The three icons on the right of the auto-hide menu (also shown below) each represents a saved preset. A preset is a file that contains user-configured layout with already-adjusted settings. Users can have multiple presets stored to the Sequoia UHD for future references, but only the latest three presets saved can be loaded from the auto-hide menu as shortcuts (only presets saved by using the right-click menu's **Save preset→Save to preset** are linked to the auto-hide menu). When the number of presets reaches or exceeds three, any new preset saved will replace the old one (in the order of preset 1, 2, and 3). Presets that are replaced are still stored in the Sequoia UHD and can be accessed by the mouse right-click menu. Switching between presets under the auto-hide menu can also be achieved when the "lock" function is enabled.*

    : Load user-defined preset 1

    : Load user-defined preset 2

    : Load user-defined preset 3

Appendix D Resetting to the Factory-Default State

There are two methods to reset your Sequoia UHD to its factory-default state:

❖ *Right-click menu: **System→Reset factory defaults** (see chapter 4 for details)*

❖ *Using the dip switch.*

To reset your Sequoia UHD to its factory-default state using the dip switch, perform the following steps:

Step 1. Power-off the Sequoia UHD.

*Step 2. Push number **2** (right) dip switch on Sequoia UHD's rear panel downwards to the **ON** position.*

Figure D-1 Push Down the Number **2** (Right) Dip Switch

Step 3. Power-on the Sequoia UHD.

*Step 4. Wait until Image windows has appeared onscreen. Then push number **2** (right) dip switch located on Sequoia UHD's rear panel upwards to the **OFF** position.*

Upon resetting your Sequoia UHD to its factory-default state, your previously saved presets stored in the Sequoia UHD's flash memory will be automatically removed; make sure to have your files saved externally before resetting the Sequoia UHD to the factory-default state.