Sequoia SERIES

One of a Kind Multiviewer





Sequoia SERIES

MULTIVIEWER WITH KVM



Sequoia Series Feature Highlights

Multiviewer integrated with KVM switch, enabling single user to simultaneously monitor and control up to 4 source computers on a display.

Flexible model selection compatible with various digital and analog video sources; extensive range of supported resolutions up to 1920x1200 (WUXGA).

Plug-and-Play ease for simple setup; automatic sensing of input signals for straightforward integration.

Streamlined operation via a single set of USB keyboard and mouse; easy control and configuration through intuitive graphical interface, hot-keys, and mouse commands.

Powerful system architecture dedicated to superb image processing; customized monitoring through dynamic image sizing and positioning, as well as full-screen, PiP overlay and complete layout flexibility.

HDCP compliance allows protected, high definition digital content to be displayed.

Seamless switch of video and audio sources independently; simple mouse movement shifts KVM control to any source computer with no latency.

Scalable design easily configured to match various application requirements with up to 20 systems.

Compact and stand-alone enclosure is also rack-mountable, along with low-noise, speed-varying fan ensure simple installation suitable for any work environment.



Sequoia Series - Sequoia Dual Overview

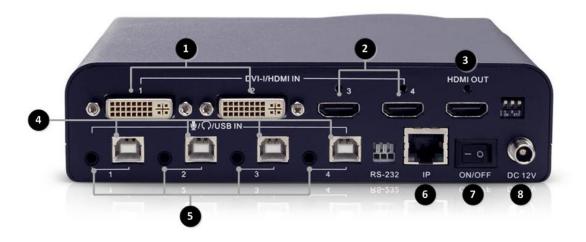


- 1 LED indicators show power, operating mode, and input source status
- 2 Audio jack available for microphone, headphone, and speaker
- USB keyboard and mouse to control the Sequoia Dual or source computer:
 - On-screen display and user-friendly GUI for flexible display layout adjustment and system configuration
 - Simple and intuitive switching of keyboard/mouse control between source computers

- USB-B port for controlling the Sequoia Dual with a computer; or cascaded with another Sequoia device for large-scale application requirement
- Built-in USB 2.0 hub for peripheral device extended to source computer (e.g. flash disk, printer, etc.)



Sequoia Series - Sequoia Dual Overview



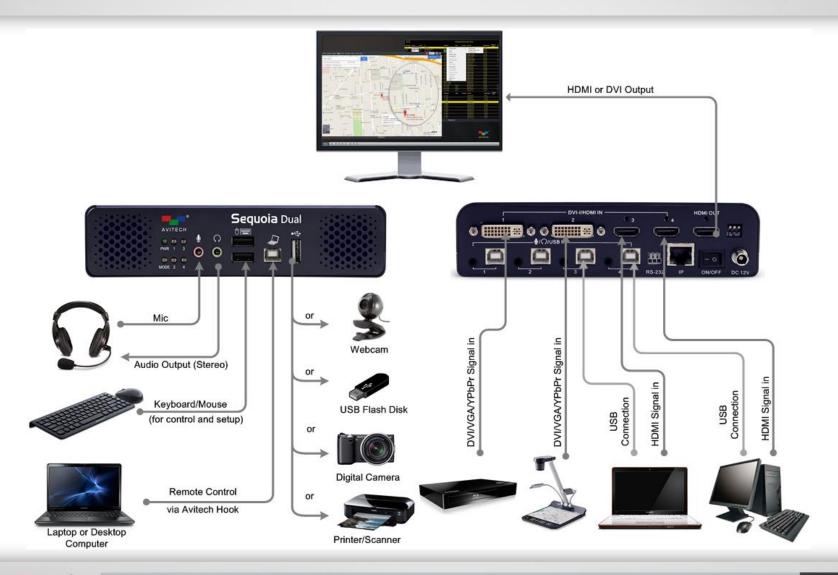
- 1 DVI-I input x2
 (also support HDMI with embedded audio, VGA, and YPbPr)
- 2 HDMI input x2 (also support DVI)

- USB-B port x4 for connection to source computers
 - Remote access to source computer
 - File/Folder transfer between source computers
- 5 Audio jack x4 for analog audio line-in and microphone
- 6 Ethernet port supports video output streaming over IP for remote monitoring and control
- On/Off switch
- 8 Power (12V DC)

- 3 HDMI output:
 - Choice of any 2 inputs to be monitored simultaneously on a display (dual-view)
 - Automatic optimum output resolution detection
 - Intuitive GUI for ease of control and system configuration



Sequoia Dual System Diagram





Sequoia Series - Sequoia 4H & 2H2U Overview



- 1 LED indicators show power, operating mode, and input source status
- 2 Audio jack available for microphone, headphone, and speaker
- 3 USB keyboard and mouse to control the Sequoia 4H or source computer:
 - On-screen display and hot-key combination for flexible display layout adjustment
 - Simple and intuitive switching of keyboard/mouse control between source computers
- USB-B port for controlling the Sequoia 4H through a computer; or cascaded with another Sequoia device for large-scale application requirement
- Built-in USB 2.0 hubs for peripheral device extended to source computer

 (e.g. flash disk, printer, etc.)
- Built-in stereo speaker set for audio monitoring



Sequoia Series - Sequoia 4H Overview

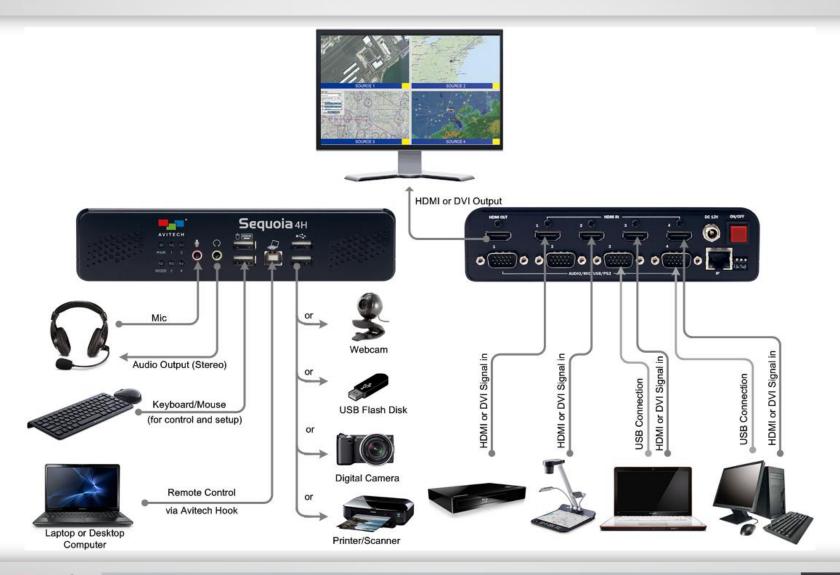


- 1 HDMI output:
 - All 4 inputs to be monitored simultaneously on a display (quad-view; can be resized and repositioned)
 - Automatic optimum output resolution detection
- 2 HDMI input x4 (also support DVI)
- 3 All-in-one connector x4
 - DB-15 male connector with fan out cables (PS-2/USB/audio/mic) connected to source computer
 - Remote access to source computer

- Power (12V DC)
- 5 On/Off switch
- Ethernet port for communication with PC-based control software; system configuration



Sequoia 4H System Diagram





Sequoia Series - Sequoia 2H2U Overview



- 1 HDMI output:
 - All 4 inputs to be monitored simultaneously on a display (quad-view; can be resized and repositioned)
 - Automatic optimum output resolution detection
- 2 HDMI input x2 (also support DVI)
- 3 BNC Input x2
 - SDI (3G/HD/SD) with embedded audio; also support CVBS (NTSC/PAL)
- 4 All-in-one connector x4
 - DB-15 male connector with fan out cables (PS-2/USB/audio/mic) connected to source computer
 - Remote access to source computer

- 5 Power (12V DC)
- 6 On/Off switch
- Tethernet port for communication with PC-based control software; system configuration



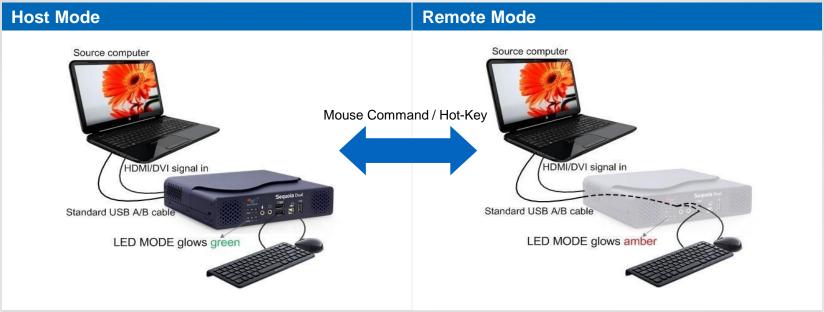
Sequoia 2H2U System Diagram





Operating Modes

Incorporating multiviewer with KVM switcher, the Sequoia Series operates under two different modes dedicated to multiviewing configuration and remote control of source computer respectively. Users can freely switch between the two modes anytime during the operation with no latency.



- Display layout configuration
- Image resize / reposition / swap
- Audio switch
- User-defined layout preset
- On-screen-display, control cursor (Host cursor) and hot-key
- System configuration directly through GUI (only Sequoia Dual)

- Access to any source computer for direct control
- Freely switch keyboard/mouse control between any source computers
- File/Folder transfer between source computers over USB interface (only Sequoia Dual)



Dual-View Multiviewer - Sequoia Dual

- The Sequoia Dual accepts 4 input sources, with choice of any 2 to be viewed simultaneously on a single display (dual-view)
- Seamless/Instant switch between video and audio source independently
- Freely adjustable image size and position; complete layout flexibility as well as full-screen and PiP overlay capability
- Embedded system with intuitive GUI featuring right-click menu and pop-up icons;
 allows for customized monitoring as well as advanced control and direct system configuration without any PC-based software





Quad-View Multiviewer - Sequoia 4H/2H2U

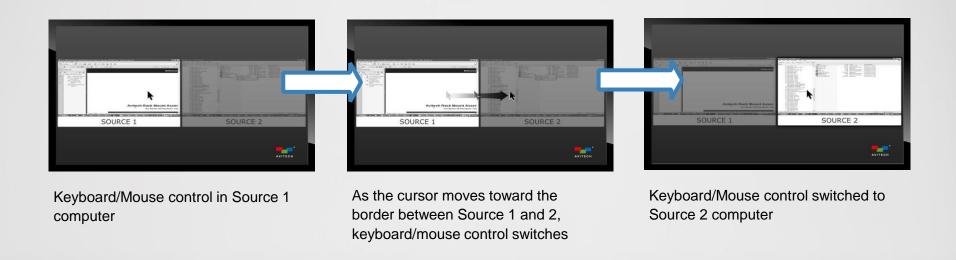
- The Sequoia 4H and Sequoia 2H2U accept and simultaneously display 4 input sources on a single display (quad-view)
- Seamless/Instant switch between video and audio source independently
- Freely adjustable image size, position and layering priority; complete layout flexibility as well as full-screen and PiP overlay capability
- Display layout customization via combination of hot-key and mouse commands
- Programmable layout cycling with adjustable time intervals for user-defined presets; complemented control software Phoenix-G for advanced setup and system configuration





Built-In KVM Switch and "Surfer" Feature

- Simple mouse command allows users to access any source computer (Known as Remote mode); utilizing a single set of keyboard and mouse to remotely control any connected computer
- Instant KVM switching mechanism allows transfer of keyboard and mouse control from one computer to another by simply moving the mouse cursor to the window border of the targeted computer ("Surfer" feature as indicated below)





Touch-Screen Support



- The Sequoia Series features touchscreen operation, applicable where interactive touch-screen control is preferred
- Single-touch (Sequoia 4H/2H2U) and multi-touch (Sequoia Dual) supportive
- Easy source switching, image sizing and positioning, as well as operation of source computers all via USB touch screen monitors with a tap of finger

File / Folder Management (Sequoia Dual)

- The Sequoia Dual employs built-in file management utility for file/folder transfer across source computers through USB interface
- Built-in utility enables browsing and accessing of files and folders contained in the hard drives of any 2 source computers currently being displayed
- Copy-and-paste or drag-and-drop methods to easily manage and transfer files and folders across computers





Ethernet Streaming (Sequoia Dual)

- The Sequoia Dual supports video output streaming over standard 100/1000Mb Ethernet networks
- Web browser-based video streams enable remote monitoring and control of the Sequoia Dual through multiple computers from distances





Cascading Sequoia Series

- Cascade (Daisy-chain) through USB connection is available between the Sequoia Dual, 4H, and 2H2U. Any combination of up to 5 Sequoia devices can be cascaded to meet larger application requirements
- One set of keyboard and mouse connected to the Master Sequoia (first Sequoia) is capable of controlling all cascaded Sequoia devices as well as all connected computers (up to 20)
- Simple mouse movement toward the edge of a monitor shifts the cursor across monitors (one monitor per Sequoia device) and switches over control to the corresponding Sequoia device





Sequoia Series Feature Comparison

	Sequoia Dual	Seguoia 4H	Sequoia 2H2U
I/O	4 Input 1 Output		
Input			
HDMI	V	V	٧
DVI	٧	٧	٧
3G/HD/SD-SDI	x	x	٧
CVBS (NTSC/PAL)	x	x	٧
VGA	٧	x	x
YPbPr	٧	x	x
Output			
HDMI/DVI	٧	٧	٧
Features			
HDCP Compliance	٧	٧	٧
Embedded System and Refined GUI	٧	X	X
Multi-Image Display	√ (Dual-View)	√ (Quad-View)	√ (Quad-View)
PiP Overlay Capability	٧	٧	٧
Free Layout Adjustment	√ (Mouse Command on GUI)	√ (Mouse Command/Hot-Key)	√ (Mouse Command/Hot-Key)
OSD (Cursor, 3D Border, Label, Pop-Up Icon)	٧	٧	٧
KVM Switch	٧	٧	٧
Surfer Feature	٧	٧	٧
User-Defined Preset	v (>50)	√ (23 Max)	√ (23 Max)
Preset Briefing/Looping	x	٧	V
System Configuration	Directly on GUI	Phoenix-G Software	Phoenix-G Software
Touch Operation	√ (Multi-Touch)	√ (Single-Touch)	√ (Single-Touch)
Built-In USB Hub Extend to Source Computer	√ (One Hub)	√ (Two Hubs)	√ (Two Hubs)
Built-In File/Folder Transfer Utility	٧	x	x
Ethernet Output Stream (Remote Monitoring and Control)	٧	x	x
Embedded Audio I/O	V	√	٧
Embedded Speakers	x	٧	٧
Communication Cascading	√ (with up to 4 Other Sequoia Series)		



Application Scenarios



Challenge: Individual users such as IT managers, professional graphic designers, software designers, testing engineers, and many system power users often require multiple computers dedicated to specific tasks under various platforms. Maintaining efficient workflow while managing complex cabling for superfluous numbers of monitors and control sets at the space-limited work environment becomes more challenging as more systems are utilized in the workstations.







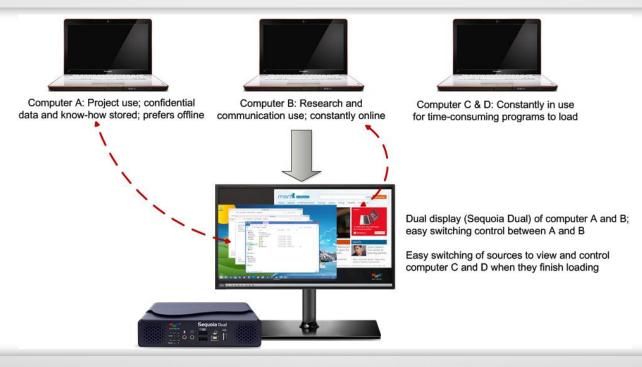
Solution: Sequoia Series stands out as a cost-effective solution for monitoring sources efficiently. Its built-in KVM switch allows the user to dynamically access multiple source computers. Utilizing one keyboard and mouse set to control up to 5 Sequoia devices and 20 source computers, Sequoia Series greatly reduces numbers of monitor/control sets as well as cabling complexity in the confined work space. Empowering individuals to multi-task, access more information and respond more effectively in a streamlined manner.





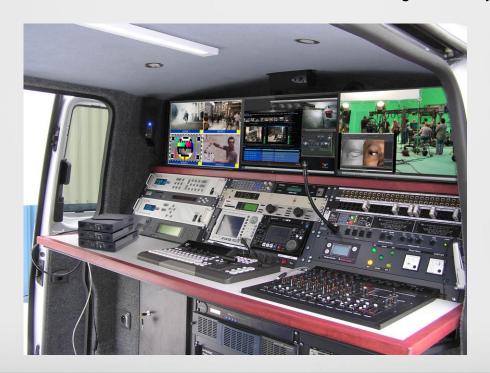


Solution: For confidential and security purposes, workstations typically consist of multiple systems under different networks in industries such as military, government, and corporate settings. With classified database being restricted to designated computers without internet access to prevent information leakage or virus incursion. The Sequoia Series allows users to switch access and operate computers dedicated to classified database and opened network interchangeably, as well as various application-specific computers all monitored and managed at one console.





Solution: Compact enclosure powered by 12V DC source that is the standardized power supply provided in vehicles, the Sequoia Series is an ideal muti-image processor to be installed in mission-critical vehicles. Such as patrol vehicle, OB van, and mobile control center where numerous computer and video sources are particularly utilized, without the needs for additional power inverter or supply. The Sequoia Series integrates aggregated information to be easily managed and access through single keyboard and mouse set according to application demands, aiming for higher situational awareness as well as effective decision-making in a timely manner.





Enhanced Multiviewing Experience

Challenge: In large conferences and presentation halls, presenters' body gesture/facial expression are key factors to attract audiences' attention but often neglected as they cannot be seen from every angle and distance. In addition, video recording for online courses or remote classrooms often encounter difficulties to clearly capture both presenters and all presented materials.



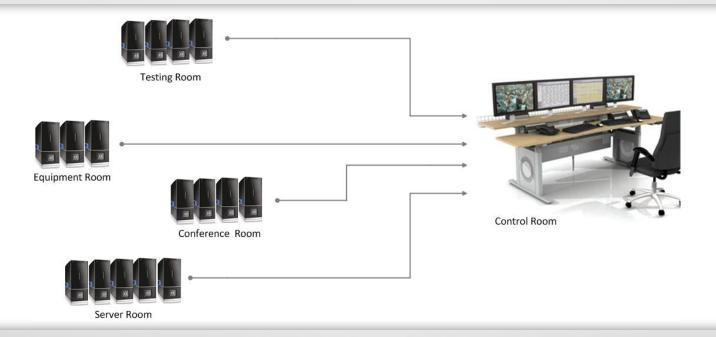
Enhanced Multiviewing Experience

Solution: Sequoia Series displays multi-layering imageries integrated from different sources (PC, guest laptop, video recorder, document camera...etc.), allowing presented slides, instant playback of lecturers and student interactions, as well as additional materials to be freely accessed and configured to any desired layout at that instance.



Control Room and Trading Floor

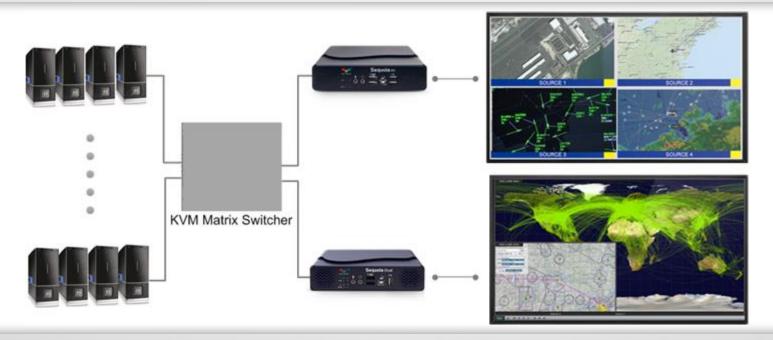
Challenge: Computers proliferate around mission-critical work environments such as traffic control room, emergency operating center and trading floor add to burdens of space, heat, and noise control problems. Much of these powerful computing resources thus are often located remotely in dedicated areas. To be able to instantly access large amount of critical data from remote computers across facilities and effectively respond to various information and situations, reliable KVM switchers with extension, along with switching and ease monitoring are highly demanded.





Control Room and Trading Floor

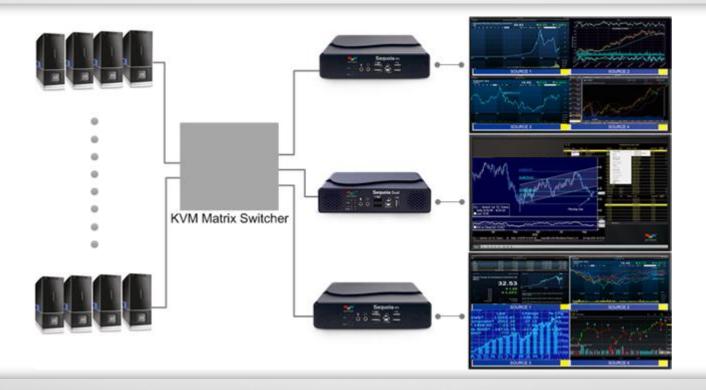
Solution: The Sequoia Series integrates multiple sources to be viewed and accessed simultaneously at one console. Accompanied with extended KVM switcher, Sequoia Series is empowered to reach numerous computers across facilities and deliver real-time video, audio, and control signals ensuring critical information such as traffic and extreme weather conditions, as well as surveillance videos, emergency calls, and hospital routings from various databases can be easily accessible to operators, maintaining full computer access in the safety-critical industries.





Control Room and Trading Floor

Solution: Integrating multiple Sequoia devices at trading floors allows traders to simultaneously monitor instant world event, market data and financial information while executing professional software for data analysis on computers away from the trading floor, maintaining streamlined workflow in the space-limited work place at the same time keeping the already stressful environment undisturbed by computer emissions of heat and noise.







Contact Avitech

Phone: 425.885.3863

Toll Free: 1.877.AVITECH

Fax: 425.885.4726

15377 NE 90th Street Redmond, WA 98052, USA

www.avitechvideo.com

sales@avitechvideo.com