Aquilon RS Alpha

LivePremier Series

#AQL-RS-ALPHA

Aquilon RS alpha is a mission-critical 4K/8K multi-screen presentation system and videowall processor with 8 inputs and 4 outputs, delivering uncompromising presentation experiences to high-end staging and premium system integration. Aquilon RS alpha combines industrial grade reliability, unrivaled ease-of-use, versatile 4K digital connectivity, unmatched real-time 10/12-bit 4:4:4 video processing power, best-in-class image quality and pure 4K60p on each input and output with ultra-low latency.

8 Seamless Inputs

8 seamless 4K60p HDMI 2.0 inputs via 2 pre-installed input cards (up to 4K60p 8-bit 4:4:4 or up to 4K60p 12-bit 4:2:2 or up to 4K30p 12-bit 4:4:4)
All input connector cards can be field-replaced to accommodate a variety of connectivity arrangements
Full set of input connector cards available separately (DP 1.2, 12G-SDI, HDMI 2.0)
Supports 4K60p input as single, double or quad plugs
Supports input formats such as 8192×1080@60p or 1080×8192@60p (aka “8k x 1k”) on a single connector
Connector status LEDs for easy troubleshooting

4 Active Outputs

4 active 4K60p HDMI 2.0 outputs via 1 pre-installed output card (up to 4K60p 8-bit 4:4:4 or up to 4K60p 12-bit 4:2:2 or up to 4K30p 12-bit 4:4:4)
The output connector card can be field-replaced to

accommodate a variety of connectivity arrangements
Full set of output connector cards available separately (DP 1.2, 12G-SDI, HDMI 2.0)
Supports 4K60p output as single, double or quad plugs
Supports custom output formats such as 8192×1080@60p or 1080×8192@60p (aka “8k x 1k”) on a single connector
Connector status LEDs for easy troubleshooting

2 Dedicated Multiviewer Outputs

2 dedicated HDMI 2.0 outputs configurable as up 2x 4K30p or up to 2x 2560×1440@60p or 1x 4K60p
24 resizable widgets on each output
Customizable layouts with 50 memories
Monitor inputs, still images and screens (Program and Preview)
Built-in clocks, countdown and timers

Native Dante™ Audio networking

Audio de-embedding/embedding on every input & output (raw audio)
De-embedded audio channels can be routed directly to the Dante™ network using onboard Dante™ card
Audio channels from external Dante™ audio processor can be re-embedded for sending to display, streaming or recording device
64×64 Dante™ channels @48 kHz or 32×32 Dante™ channels @96 kHz
Dual redundancy Ethernet ports – AES67 support

Flexible Screens and Layers Management

Outputs configurable as single screens or edge-blended widescreens
Up to 4x 4K60p program outputs
Flexible layer management: each screen gets dedicated layers of various sizes (2K, 4K …) using common-pool layer resources
Any unused output configurable as a scaled auxiliary 4K60p output to display any input or screen (1:1 or scaled)
1000 user definable screen presets and 500 master presets to easily recall looks on all the screens and auxiliary outputs

Up to 4x 4K Mixing Layers

Supports mixing layers (true seamless transitions) and split layers (cut transitions)
Up to 4x 4K or 8x Dual/2K mixing layers (8x 4K or 16x Dual/2K split layers)
Layer source can be a live input, a still image (or a screen PGM for split layers)
Each output has an unscaled background mixer supporting seamless transitions

	Background source can be still image or live source
Ultra-low Latency 10 and 12-bit Processing	Based on Analog Way exclusive 5th generation scaling engine Extremely low latency, as low as 1 frame in proper configuration 40 Megapixels throughput at 10 bits 4:4:4 @60Hz on Program, without restricting Preview or Multiviewer HDR compliant with HDR10 and HLG Advanced motion compensation deinterlacing BT.601; BT.709; BT.2020; BT.2100 color spaces Compatible with HDCP 1.4. and HDCP 2.2
Creative Display Configurations	Supports any combination of single-screen or widescreen applications Ability to place the program outputs anywhere on an almost limitless video canvas space for special LED wall applications Custom output formats for non-standard display applications Independent resolution and rate on all outputs Rotation capability in increments of 90° Area of Interest option to customize active areas of outputs Advanced pixel pitch management & bezel compensation
Advanced Video Effects	True A/B Mix Misc. layer border effects/colors and separate shadow Transitions: Cut, Fade, Slide, Wipe, Circle, Stretch, Depth, Flying layer movement with programmable paths Layer effects: Background Cut, Transparency, Luma/Chroma Key, DSK, H&V Flip, Cut and Fill Colors effects: B&W, Negative, Sepia and Solarize
12 Concurrent 4K Still Images	12x 4K or 24x 2K concurrent still images – fully resizable Still images support alpha-channel Still image library with 100 memories Multi-file download/upload via Web RCS Capture from live inputs (coming soon)
Simple Setup and Advanced Control	Web RCS: embedded intuitive drag and drop HTML5-based interface

Live video thumbnails shown on GUI
Multi operator real-time collaboration
AW VideoCompositor: Premium drag & drop Crestron® GUI
Shot Box2/Control Box2: Cost effective control solutions
Simple REST API (HTTP & TCP) and advanced TCP protocol based on JSON
AMX/Crestron drivers
New controller

Other Features

Highly ruggedized chassis with cleanable air filter
Swappable redundant power supplies (1+1)
Quiet: 49dB average noise at 1m when ambient temperature is less than 32°C/90°F
Dedicated BNC with loop out for Framelock, blackburst and tri-level sync
EDID management on every input and output
Backup and restore functions
Tally/GPI-O
Fully functional simulator for offline configuration and practice
Expansion via simple linking possible (future hardware upgrade)