

# Lumagen®

# ARTISAN™



## ARTISAN

### noun

ar·ti·san 'är-tə-zən

- 1: an expert distinguished by uncompromising dedication to their trade.
- 2: has both the creativity and the skill to make a functional and distinctive product ensuring the highest quality standards.
- 3: master craftsman of fine objects.

The Lumagen ARTISAN™ video processor renders the finest handcrafted in-motion video images. Made for filmmaker's to preserve their vision and movie enthusiasts to see the image as the director intended.

Lumagen ARTISAN, the master craftsman of image science.

*See Back for more Technical Information on Lumagen's Outstanding Quality In-Motion Image Processing.*

## Lumagen's ARTISAN™

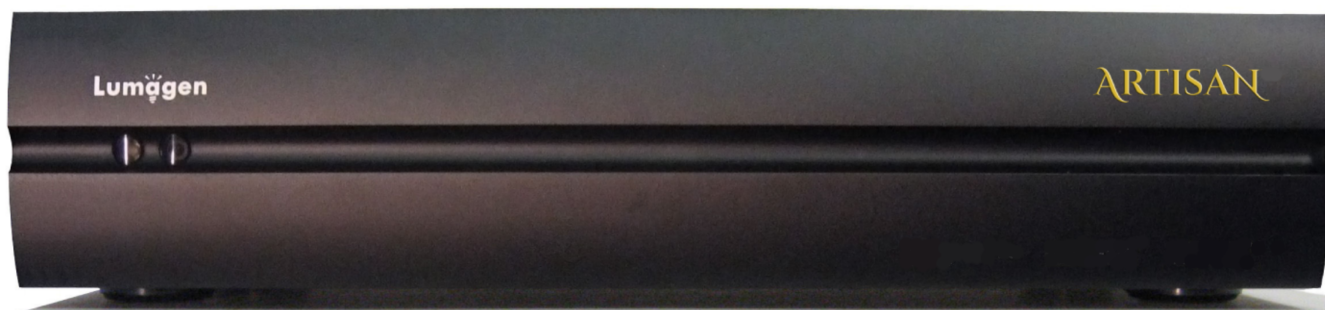
8k Video Processor brings AV image mastery into the home cinema. As a labor of love, we chose the finest components and designed our video processing algorithms to complement the artistic craft of the filmmaker. The ARTISAN™ is a handcrafted creation that authentically maintains the filmmaker's intent.

**Completely New Design Integrates 8k HDMI Chips and a Higher Performance FPGA than the Radiance Pro™ Series.**

### FEATURES:

- HDMI 2.1 Support for 8k and 4k120 Input & Output
- 12-bit 4:4:4 Video Processing
- Automatic Aspect Ratio Detection and Selection
- Industry's Best Dynamic Tone Mapping for HDR Content with Accurate Color Rendition when compared to Studio Masters
- True Genlock:
  - Each Input Frame is Output Exactly Once
  - Optimal Lip-Sync
  - Game Mode (3 mS video delay) with all Processing Enabled
- Programable Video Delay
- Fast Source Switching with 8 Inputs & 2 Outputs
- Compatible with Dolby® LLDV™
- Low Output Electrical Noise
- Ultra Low Output Jitter for Improved Audio Quality
- Darbee Vision Enhancement
- Non-Linear-Stretch
- Directly Control Seymour Screen Excellence™ Screen Masking
- Additional Customization Features
- Housed in a 2U Rack Mountable Case
- Free Software Updates Continue After Purchase
- 2 Years Limited Warranty, Extendable to 5 Years

**ARTISAN, the master craftsman of image science - See what the director intended™**



For Testimonials about the Lumagen Video Processor Experience Visit [www.lumagen.com](http://www.lumagen.com)



# ARTISAN™

Lumagen's 8k and 4k120 Video Processor

**Image science is our passion, and the ARTISAN allows viewers to See what the director intended™.**

Lumagen is adding to its 22-year legacy of video processor development by continuing to enhance features and algorithms of their already highest quality in-motion image science based processing. An evolution of Lumagen's previous commercial grade video processors, the ARTISAN continues to provide:

- \*Award Winning In-Motion Image Video Processing & Proprietary Algorithms\*
- \*Ultra Low HDMI Output Jitter Before the Audio Processor for Improved Audio\*
- \*Ultimate Video Flexibility For Your Home Cinema\*
- \*Celebrated Feature Set\*
- \*Unparalleled Customer Service\*

**The ARTISAN is engineered & designed to be adaptable to incorporate new features as technologies evolve, providing industry professionals and movie enthusiasts the best image experience possible. Lumagen will offer a generous trade-in program for customers who currently own the Radiance Pro series video processor desiring to upgrade to the ARTISAN.**

Much more than an HDMI switcher, the ARTISAN has a host of features to improve the image on your screen and audio quality.

The ARTISAN video processor supports up to 8k60 and 4k120 inputs and outputs, including HDCP 2.3, HDR10, and HLG, and is compatible with Dolby® LLDV™ sources. The ARTISAN video processor has eight inputs, two outputs, and a multitude of video processing, setup, and calibration features. Optimizing HDR content has perhaps become the most important video processing feature. The ARTISAN integrates and will continue to improve upon Lumagen Dynamic Tone Mapping (DTM) which analyzes multiple regions of every frame of content, detects scene changes, and optimizes the image for each frame of content. Jon Thompson, a movie producer who is responsible for post-production image quality at a major studio, recently evaluated the Lumagen DTM versus the other options. He stated that "the other DTM options are not even in the same league as the Lumagen."

Scaling quality again comes to the forefront with 8k projectors and televisions. It should be intuitively obvious that home cinema scaling must be evaluated at viewing distance using actual moving image video content. The Tektronix PQA600C quantitative image analysis program is used by major studios and broadcast networks and includes 30 years of development by perception physicists. It includes viewing distance in its evaluation of scaling. The ARTISAN builds on and will continue to improve the Radiance Pro series which has the industry's best motion picture scaling and scores more than 20% higher than the competition using the Tektronix analysis software. Lumagen's scaling provides the best quality scaling for 4k, 1080, 720, and SD, and with the ARTISAN sources for 8k projectors and TVs. Scaling is also essential for aspect-ratio control, especially when using an anamorphic lens.

In addition, the ARTISAN has an edge-sharpening feature that helps restore detail lost during compression of the digital content.

The ARTISAN uses circuitry to reduce HDMI output clock jitter. Minimizing signal jitter is an extremely important criteria for HDMI and the ARTISAN will produce an optimal clock to send to the audio processor to minimize jitter at the DACs. Reduced jitter at the DACs reduces distortion and significantly improves audio.

Reference quality colorimetry is often overlooked as part of a high-end home cinema. The ARTISAN can provide automated video equalization, using third party calibration software, with more accuracy than calibration without a 3D LUT. Using the ARTISAN's DTM, and Color Management System, you can *See what the director intended™*.

Other features include image-based instant-auto-aspect detection and selection for HD, 3D, and 4k UHD and HDR sources. Anamorphic support with, or without, an anamorphic lens. Image based auto-aspect selection, plus precise geometry adjustments including size, and masking, are available. The ARTISAN's Non-Linear-Stretch (NLS) feature allows the user to stretch 16:9 content to fill an anamorphic screen using their preferred settings. For 16:9 screens and TVs, an anamorphic image can be placed anywhere in the active screen area, or with zoom, and/or cropping, can fill a larger portion of the screen. Multiple configuration memories allow for different independent configurations, such as day, night, sports, and black-and-white.

The adaptability of the ARTISAN is second to none. Using Field Programmable Gate Array (FPGA) technology, the ARTISAN can add hardware image processing and setup features years after installation.

## Key Features

- Proprietary Lumagen NoRing™ scaling
- HDR10, and HLG, Dynamic Tone Mapping
- Compatible with Dolby® LLDV™
- Image based source instant auto-aspect selection
- Desaturates Rec 2020 content for a Rec 709 TV/projector
- Anamorphic screen support for up to 4k sources with, or without, an anamorphic lens
- Programmable output aspect, size, and masking
- Darbee™ Digital Visual Presence (DVP™) for ≤ 1080p60
- Inputs and outputs support HDCP 1.X and HDCP 2.3
- Supports processing of 2D, and 3D, sources
- Eight 8k60 inputs and 2 8k60 outputs
- FPGA design allows for software upgrades with new video features and algorithms
- Per-pixel SD/HD deinterlacing
- 4913-point (17x17x17) 3D LUT based CMS
- 21-point Parametric Grayscale calibration
- Directly control Seymour Screen Excellence™ screen masking
- Rack-mountable
- Less than 60 Watts
- Two-year Limited Warranty
- Optionally extend Limited Warranty to 5 years