

Lumagen

Lumagen video processors render the finest handcrafted in-motion video images. Made for filmmakers to preserve their vision and movie enthusiasts to
See what the director intended™.

- *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*

Lumagen video processors are engineered & designed to be adaptable to incorporate new features as technologies evolve, providing industry professionals and movie enthusiasts the optimal image experience possible. Future proof your investment with a Lumagen.

LUMAGEN VS ENVY COMPARISON

Image quality quantitative scaling test for 1080p to 4k using the Tektronix PQA600C quality analysis software used by major networks and studios for quantitative image quality analysis. Testing used the movie studio's standard settings and includes algorithms to account for viewing distance

RADIANCE PRO™	ENVY XTREME MK2™
5.1	4.2

Results of a “single-blind study” at viewing distance with five panelists comparing the Radiance Pro to the Envy Extreme by AVS Forum Woofers.

RADIANCE PRO™	ENVY XTREME MK2™
The Radiance Pro image quality was “the overwhelming preference of all five panelists”	

Product Design

RADIANCE PRO™	ENVY XTREME MK2™
<p>Efficient, custom architected and custom designed. Uses large current-generation Intel FPGA for maximum reconfigurability.</p> <p>Lumagen chose an FPGA that had twice the resources initially needed. Even with all the features Lumagen has added, there is room for more.</p>	<p>Generic PC. Reported up to 400 Watts. Typical PC reliability issues</p>
<p>Actual wall-power usage less than 35 Watts. Near silent operation</p>	<p>Generic PC. Reported up to 400 Watts. Typical PC reliability issues</p>

Product chassis

RADIANCE PRO™	ENVY XTREME MK2™
<p>Small 1U form factor. An even smaller compact case version of the Radiance Pro 4242 and 4240 are available if space is limited.</p>	<p>PC 2U to 4U chassis</p>

Initial configuration effort

RADIANCE PRO™	ENVY XTREME MK2™
<p>Quick setup for typical configurations using step-by-step setup slide set.</p> <p>Lumagen support available by phone and/or email for every setup for every dealer *and* for every end-user</p>	<p>Setup is required. Dealers tell us it is more difficult to set up than the Lumagen and certainly not “plug and play”</p>

Company

RADIANCE PRO™	ENVY XTREME MK2™
<p>23+ years of award-winning video processor custom-design with USA manufacturing. Lumagen has survived, and thrived, while other video processor companies have come and gone</p>	<p>Approximately five years of production using generic PC components.</p>

FEATURE COMPARISON

FEATURE	RADIANCE PRO™	ENVY XTREME MK2™
Maximum number of inputs	10	1
Maximum number of outputs	4	1
Calibration “1D LUT” for grayscale	Yes	Yes
3D LUT for calibration	Yes	Yes
Switching Speed	As little as 3 seconds. Depends on settings, and input rates.	Longer delays due to AVR switching time
Support for 1080 3D formats	Yes	Yes
Darbee™ processing for up to 1080p60 content	Yes	No
Kaleidescape Costar auto-switching	Yes	No
Kaleidescape Strato Content type Metadata support	Yes	Yes
Direct Screen-Masking Control	Yes	Yes
Remote control with single button - press selection of multiple profiles in user configuration memories.	Yes	Reported as no. Reported that users must navigate the menu.
Warranty	Two-year Limited Warranty. Five-year optional Limited Warranty	Two-year Warranty, with upgrade to four years

HDR Dynamic Tone Mapping

RADIANCE PRO™	ENVY XTREME MK2™
<p>Yes Jon Thompson, a movie producer, said, “This is the best tone mapping I have ever seen, including professional non real-time solutions.”</p> <p>Radiance Pro DTM being used for postproduction QA at a major studio for consumer HDR releases so you “See what the director intended™”</p>	Yes

Instant Auto Aspect

RADIANCE PRO™	ENVY XTREME MK2™
Yes Lumagen designed Auto Aspect to work with analog and digital sources in 2014. Lumagen updated the Auto Aspect to be instant. It detects and changes aspect in < 1/10th second	Yes

Genlock

RADIANCE PRO™	ENVY XTREME MK2™
Yes Essential for maintaining the optimal lip-sync and to prevent dropped or repeated frames	No Drops lip-sync.

Low latency video processing

RADIANCE PRO™	ENVY XTREME MK2™
Yes With Genlock on, and all features active, delay is constant at one frame time plus 3 to 6 mS in normal processing mode. With Genlock enabled there are no dropped or repeated frames (24p in and out, 50i/50p in and 50p out, or 60i/60p in to 60p out)	No Reported as about 120 mS to 230mS of video delay. Must be used with audio processor capable of exceptionally long audio delay settings. Can increase Lip Sync issues

HDMI “Lip-sync” EDID feature

RADIANCE PRO™	ENVY XTREME MK2™
Yes, on a per input basis	Yes

Programmable video delay for Lip-sync

RADIANCE PRO™	ENVY XTREME MK2™
Yes, on a per-input, and per-input- resolution basis	Reported as No

Game Mode with all features active

RADIANCE PRO™	ENVY XTREME MK2™
Yes For the 16:9 in and out at 60p, with all features and Genlock enabled, delay is about 3 mS	Not a real Game Mode. Just less latency than before. Reported to be 80 mS to 100 mS. Envy game mode latency is 25 times longer than Lumagen game mode!

Non-Linear Stretch (NLS)

RADIANCE PRO™	ENVY XTREME MK2™
<p>Yes - Since 2004.</p> <p>User programmable.</p> <p>In 2004 Lumagen evaluated and rejected “vertical NLS” as being detrimental to perceived image quality</p>	<p>Yes</p>

Support

RADIANCE PRO™	ENVY XTREME MK2™
<p>Best in industry!</p> <p>After sales support makes or breaks your system. Jim Peterson makes his 20+ years of experience in remote system support available most days after 9 AM Pacific time and into the evening. This includes issues known to not involve the Radiance Pro.</p> <p>Customers can call Lumagen directly. No appointment necessary. Calls late in evening or on weekends often get answered, or Jim calls back when he is available. One dealer said, “<i>I will always specify Lumagen, so I have access to support from Jim Peterson.</i>”</p>	<p>It is reported that customers are not allowed to contact company for support.</p> <p>It is reported that dealers must make an appointment for support.</p> <p>It is reported that training costs money.</p>

The information contained in this document is Lumagen confidential under the Dealer Agreement.



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