Radiance Pro™ 4k60 Video Processor Family

See What the Director Intended ™

The Radiance Pro™ series of video processors enhance the award-winning Radiance video processor family by adding support for 4k60 inputs and outputs, including HDCP 2.2, HDR, and HLG. Winner of a *CEPro™ Best of 2015* award, and a *Best Video Product* award in Australia in 2019, the Radiance Pro is not standing still. Lumagen continues to enhance features and algorithms with software/FPGA-coding updates.

The Radiance Pro family offers up to ten inputs, and four outputs, plus a multitude of processing, set up and calibration features. More than just an HDMI switcher, the Radiance Pro has a host of features to improve the image on your screen and is considered by many experts to be an essential part of any quality home theater.

Optimizing HDR content has become perhaps the most important video processing feature. The Radiance Pro Dynamic Tone Mapping (DTM) analyzes every frame of content, detects scene changes, and optimizes the "transfer function" for each frame of content. A movie producer, who is responsible for post-production image quality at a major studio, evaluated the Radiance Pro DTM versus the other available, DTM options. He said that "the other DTM options are not even in the same league as the Radiance Pro DTM." This is high praise coming from a movie production professional.

Scaling quality again comes to the forefront with the advent of 4k projectors and televisions. Lumagen's NoRing™ scaling provides the best quality scaling for 1080, 720, and SD, sources for 4k projectors and TVs. Scaling is also essential for aspect-ratio control, especially when using an anamorphic lens. The Radiance Pro has a new "sharpness" features that helps restore some detail lost in compression used for transmission of content.

Fast switching is an essential part of any good home theater, and the Radiance Pro can significantly reduce the very-long switching times that occur when using an AVR or audio processor for switching. Many people say they do not think switching time is an issue, that is until they experience the long lock-on times of many projectors. The Radiance Pro can be programmed to significantly reduce switching times. The Radiance Pro can split the video and audio, so a 1080p AVR or audio processor can be used with 4k HDCP 2.2 sources.

Reference quality colorimetry is often overlooked as part of a high-end home theater. The Radiance Pro can provide automated video equalization, using third party calibration software, with more accuracy than the non 3D LUT based calibration employed by television and projector manufacturers. With the Radiance Pro's 4913-point 3D LUT based Color Management System you can *See What the Director Intended*™.

Essential features include anamorphic screen support for HD and 4k UHD sources, with or without an anamorphic lens. Image based auto-aspect selection, and precise geometry adjustments including size, masking are available. The Radiance Pro's Non-Linear-Stretch (NLS) feature allows the user to stretch 16:9 content to fill an anamorphic screen. For 16:9 screens and TVs, an anamorphic image can be placed anywhere in the active screen area or apply some zoom and crop to fill a larger portion of the screen. Multiple output configuration memories allow for features such as day/night, and black-and-white color temperature differences. Dual-port I/O cards (all 4XXX models) can be upgraded from 9 GHz to 18 GHz in the field. The Radiance Pro 5348 has a fixed I/O configuration.

The adaptability of the Radiance Pro is second to none. Using Field Programmable Gate Array (FPGA) technology, the Radiance Pro can add hardware image processing and setup features long after installation with a simple software update. Just as 3D video support was added to earlier Radiance models years after introduction, the Radiance Pro is adding new features over time. One example is DTM which was added four years after product introduction and is available to all Radiance Pro owners by updating to the latest release.

Radiance Pro Models:

4242+: In: 2 - 18G, 2 - 9G. Out: 2 - 9G
4244+: In: 4 - 18G, 2 - 9G. Out: 2 - 9G
4246+: In: 6 - 18G, 2 - 9G. Out: 2 - 9G
4444+: In: 4 - 18G, 2 - 9G. Out: 2 - 9G, 1 - 18G, 1 - Audio
4446+: In: 6 - 18G, 2 - 9G. Out: 2 - 9G, 1 - 18G, 1 - Audio
5348: In: 10 - 18G, Out: 2 - 18G, 1 – Audio (fixed configuration)

4242-18G: In: 4 - 18G. Out: 1 - 18G, 1 - Audio
4244-18G: In: 6 - 18G. Out: 1 - 18G, 1 - Audio
4246-18G: In: 8 - 18G. Out: 1 - 18G, 1 - Audio
4444-18G: In: 6 - 18G. Out: 2 - 18G, 2 - Audio
4446-18G: In: 8 - 18G. Out: 2 - 18G, 2 - Audio

Radiance Pro 5348

Radiance Pro 4446

Radiance Pro 4242

Key Features

- *Proprietary Lumagen NoRing™ scaling*
- *HDR10, and HLG, Dynamic Tone Mapping*
- *Tone-map HDR to an HDR, or non-HDR, TV/projector*
- *Supports Rec 2020 content using 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*
- *Image based Auto Aspect selection*
- *Vertical Keystone correction for 2D and 3D*
- *Darbee™ Digital Visual Presence (DVP™) enhancement technology for up to 1080p60 sources*
- *Inputs and outputs support HDCP 1.X and HDCP 2.2*
- *Base configurations have 9 GHz I/O. Optional 18 GHz.*
- *Up to ten 4k60 inputs, at up to 18 GHz. Varies with model*
- *Up to two (424X), or four (444X), outputs (same image)*
- *Optionally up to one (424X), or two (444X), 18 GHz outputs. 5XXX video outputs are 18 GHz*
- *FPGA design allows for software upgrades with new video features and algorithms*
- *Supports processing of 2D and 3D sources*
- *All models have the same processing quality and features (except PiP/PoP will be in 444X only)*
- *PiP/PoP for 444X models (future update)*
- *Per-pixel SD/HD deinterlacing*
- *4913-point (17x17x17) 3D LUT based CMS*
- *21-point Parametric Grayscale calibration*
- *Optional dual 12V trigger outputs (444X only)*
- *Rack-ears available (all but -C compact models)*
- *High reliability external power supply*
- *One-year Limited Warranty*

Here is what customers are saying about Lumagen and the Radiance video processors:

"I finally got around to updating my Pro with the latest firmware and tried dynamic tone mapping. I am not sure what kind of voodoo you guys have out there in Oregon, but wow..... :-)." John B.

"The Lumagen is absolutely essential for playback of HDR content with my JVC RS620 projector." David - Boston

"Lumagen makes me feel, after every major update, that I get a new projector every time, from IM to the DTM a day and night change. It's a game changer and it's a must." Ahmed - Bahrain

"As for the Radiance Pro, all I regret is not buying it earlier. It has made every picture better. Old and new, it's night and day, worth every penny." gadgetfreaky - AVS Forum

"*Anyone who owns the Radiance will tell you how amazing it is. It does everything you've heard it does, and then some. It is the most important and most powerful piece of equipment in my setup.*" Dave - Madison, WI

"*The quality and the feature set of the Radiance product speak for themselves, but the Lumagen team's openness and readiness to listen to customer feedback and suggestions - and implement them quickly via free product updates - is the very definition of great customer service*." Joel - U.K.

"*Lumagen not only produces the best video processors around (the Radiance in particular is a wonder to behold), their customer service and after sales care are second to none. This company is a marvel. If only every company in the AV industry performed to this standard!*" Tony - U.K.

Lumagen Inc., Phone 503-574-2211, sales@lumagen.com, Beaverton Oregon. Products manufactured in the USA.

January 24, 2021