Christie
RGB laser projection

Unprecedented brightness, color and image quality

RGB laser sets the stage for the next generation of large-scale visual experiences. Based on Christie® Freedom™ illumination, a scalable laser light source and featuring a fiber-coupled projection head, Christie RGB laser systems are engineered to produce unprecedented levels of brightness, color and image quality.

Giant screens, 3D cinema, theme parks, projection mapping and other colossal productions can now be scaled-up to previously unattainable levels, enabling the most memorable and impressive spectacles imaginable. Content creators, designers and directors have the ability to marvel audiences like never before.

Designed and built in our world-class, North American engineering and manufacturing facility and backed by over 85 years of industry-leading expertise, Christie RGB laser systems represent the most advanced architecture available in this new and emerging illumination platform.
Christie
3P laser system

Producing the highest-brightness levels of any single-head projection system, the Christie® 3-Primary (3P) RGB laser projector represents the pinnacle of laser projection design. The Christie 3P system is ideal for giant cinema screens, projection mapping, rental staging, large scale spectacles and any application where high-brightness and reliability are paramount.

Christie Freedom laser illumination

The Christie Freedom laser illumination platform consists of rack-mounted laser modules. Each laser module contains the individual red, green and blue laser diodes, which are combined to produce up to 5,000 lumens of white light per module. Because of the scalability of this platform, up to 12 laser modules can be easily added, removed, activated or disabled depending on the brightness requirements. This provides up to 60,000 lumens per rack. Shorter racks with a capacity of seven laser modules, or up to 35,000 lumens, are also available. Each laser module is also independently cooled, providing built-in fault protection, improved efficiency and ultimate reliability.

Fiber optic link

The patented fiber optic link connects the laser module rack with the projection head. Available in various lengths from 5m (16 ft) to 20m (65 ft), the fiber link allows the laser rack to be installed away from the projection head improving installation, HVAC and noise management, and maintenance.

Wide color gamut

The wide color gamut produced by Christie RGB laser projection systems significantly exceeds the DCI P3 specification and is the first commercially-available display system that replicates the Rec. 2020 color space. This enhanced pallet of colors enables new creative possibilities and natural color reproduction.
Developed for 3D applications, Christie 6-Primary (6P) RGB laser systems employ two projection heads and two sets of RGB laser primaries – one for the left eye, and one with slightly offset wavelengths for the right eye. Reusable glasses then filter out the different wavelengths and direct the light to the eye it was intended for. 3D content feels natural, is brighter and achieves DCI brightness and color compliance for both eyes. The Christie 6P system offers premium large-format theaters, 3D domes, visualization and immersive theme park rides, brightness and color levels that have never been achievable using other technology.

**Natural 3D viewing**

Featuring a dual-head architecture, the Christie 6P system delivers bright, colorful and natural 3D viewing. Unlike a single-head projector that is required to sequentially flash left and right images, the Christie 6P delivers both left and right eye images simultaneously to both eyes. This allows the Christie 6P to achieve 14 fL of light onscreen in 3D while also reducing viewing discomforts such as nausea, headaches and eye strain that some people experience when watching 3D content.

**Projection heads**

Housing the 3DLP® chip optical path, lenses and electronics, the projection head for the our RGB laser projection systems are available in three models. Each head is designed for specific requirements and applications.

**Christie Solaria CP42LH**
- DCI-specified
- 4K, high frame rate
- Optimal performance on low-gain white screen
- 3D compatible with polarization system

**Christie D4KLH60**
- Christie TruLife™ electronics
- 4K, 60Hz 3D performance
- Christie Twist™ warping, blending and scaling
- 24/7 use capability

**Christie Mirage 4KLH**
- Christie TruLife electronics
- 4K, 120Hz 3D performance
- Christie Twist warping, blending and scaling
- 24/7 use capability

**Scalable light source**
Up to 60,000 lumens

**Impeccable visuals**
4K, 120Hz, high frame rate, high contrast and wide color gamut

**Long operational, robust light source**
30,000 hours to 80% brightness

**High-brightness, natural 3D**
14 fL and DCI-specified color in 3D on giant screens without any viewing discomforts

**Built-in redundancies for improved reliability**
Multiple light modules with independent cooling systems
85 years of industry-leading experience

Christie® has been helping customers create the best shared experiences by offering a full range of leading-edge products, services and technologies. Christie’s focus on engineering and innovation has placed us at the forefront of projection technology. With our RGB laser projection systems, we continue to raise the bar for visual spectacles around the world.

Choosing Christie gives you access to 85 years of industry-leading expertise in creating and sharing the most impressive visual installations and applications. Working alongside an extensive network of partners and dealers, Christie can tailor an RGB laser projection solution to meet your needs.