



A NEW DIMENSION: A REVOLUTIONARY CHANGE IN DIGITAL CINEMA PROJECTION BASED ON LASER LIGHT SOURCES

KODAK Laser Projection Technology

You've seen digital. You've seen 3D. Now you can see the future.
Welcome to Laser.

KODAK Laser Projection Technology combines the strengths of lasers with digital projection to deliver more than just a new light source to the cinema industry. This unique full projector optical design leverages the best attributes of lasers to deliver high dynamic range, wide color gamut, high optical efficiency, low energy usage and substantially brighter 3D than systems common to the industry, while at the same time resolving laser's toughest problem — laser speckle.

Kodak has developed a proof-of-concept prototype projector utilizing KODAK Laser Projection Technology. This revolutionary projection technology proves the viability of using lasers in the motion picture exhibition industry — delivering:

- Combined 2D and 3D projection capability
- Bright 3D images, twice as bright as those common in the industry
- High dynamic range and wide color gamut performance
- High power efficiency
- DCI capable 2K resolution scalable to 4K

Since the invention of lasers some 50 years ago, engineers and scientists have made many attempts to use the technology for high quality motion picture projection. With KODAK Laser Projection Technology...

...now you can.

Kodak





Commercialization Ready

- Kodak is actively working with potential licensees to commercialize as quickly as possible.
- Technology viability is proven through the fully functional Digital Cinema quality projector prototype.
- The prototype has a footprint equivalent to current projectors. Kodak has further refined the design to fit into a package size proportionate to other 10,000 lumen class projectors.
- Kodak laser safety analysis completed and filed with the FDA.
- Cost-conscious design approach used for the prototype.
- Design is scalable from 10,000 to 40,000 lumens enabling commercialization of a single product platform.

Key Features

Dual 2D / 3D Operating Modes

- 14 fL Screen Brightness on a 40ft gain of 1 screen.
- 8 fL Screen Brightness on a 40ft gain of 2.3 silver screen.

High Dynamic Range

Operating dynamic range of 10,000:1 with a demonstrated capability of 20,000:1.

Scalable Optical Power Capability

Operating at 11,000 lumens, with designed in scalability to 40,000 lumens.

Wide Color Gamut

Encompasses the DCI specified minimum color gamut while providing a capability for the creative community to expand their creative palettes.

Bright 3D

- Lasers are inherently polarized. By eliminating the light losses caused by polarizing, the unpolarized Xenon source, we gain twice the light output of conventional systems.
- The use of optical fibers has been eliminated, allowing the polarization states to remain pure through the entire optical system and improving the optical efficiency of the system.

Reduced Total Cost of Ownership

- The entire projector optical system has been redesigned, leveraging the benefits of laser illumination and resulting in a cost-effective design.
- The lower energy consumption of the lasers compared to the Xenon lamp creates the potential for significant energy savings for the overall system.
- Lasers deliver long life without the early drop in power common with Xenon lamps.
- Environmental and safety benefits through the elimination of Xenon lamps and lower energy consumption.
- Elimination of service costs associated with Xenon lamps.

