Anatomy of a laser phosphor projector

What is laser phosphor illumination?

- A solid-state, lampless projection illumination technology
- Uses blue laser diodes as the primary light source

The majority of laser phosphor projectors shine blue laser light onto a phosphor wheel to create yellow light. Blue light is then combined with the yellow light to create white light. This white light is split into the three primary - red, green and blue - colors using a prism or a color wheel. From these primary colors, a laser phosphor projector is able to reproduce a wide variety of different colors.

10 advantages of laser phosphor

- No lamp changes required
- 20,000+ hours operational life
- No need for filters (in most designs)
- Reduces down-time and maintenance
- Reduces costs over time
- Instant on/off capabilities
- Low energy consumption
- 24x7 operation
- High-brightness, high-contrast and wide color gamut
- Choice of entry-level models to premium projectors
- 24x7 availability

Laser phosphor is ideal for high-use applications

- Boardrooms
- Classrooms
- Auditoriums
- Location-based entertainment venues
- Retail locations
- Houses of Worship

Typical laser phosphor illumination system

Types of laser phosphor illuminated projectors

- Typical laser phosphor
- Laser phosphor hybrid
- Laser phosphor with red laser

Click to learn more about Christie’s laser phosphor solutions.