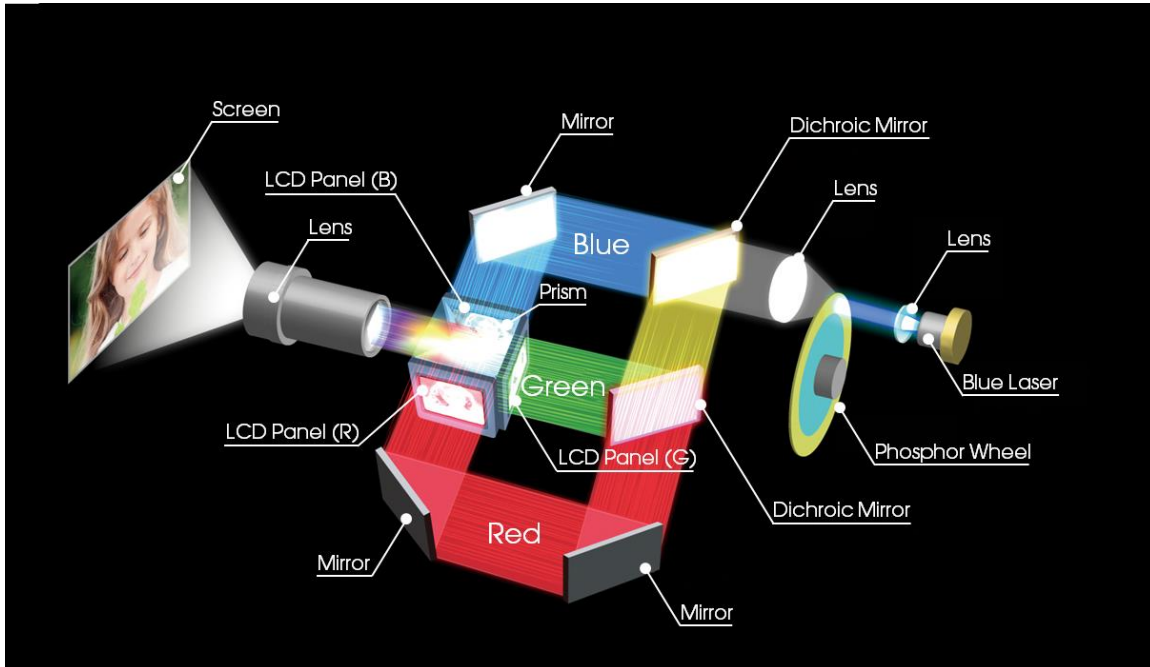


# The 3-chip advantage

After Sony's laser and phosphor wheel, the remaining optical engine reaps all the benefits of Sony's 3-chip system. In this design, a pair of dichroic mirrors separates white light into Red, Green and Blue beams. These pass through the LCD layers of the three microdisplays, which reproduce the Red, Green and Blue components of the video picture. These Red, Green and Blue components immediately pass into an optical prism, which fuses them into a unified, full-color image. In the 3-chip system, the projector displays all the colors, all the time.



In the 3-chip design, there's one chip each for Red, Green and Blue, enabling our laser projectors to show all the colors all the time—a powerful advantage.

The benefits are many:

## Up to 7000 lumens of light output

The 3-chip design is instrumental in delivering the benchmark performance of 7000 lumens.

## Up to 7000 lumens of color light output

Projector light output is conventionally measured on an all-white screen—not exactly an accurate representation of actual viewing conditions. A more realistic (and more demanding) test is color light output, as standardized by the Society for Information Display (SID) in 2012. The color light output of single-chip projectors is just a fraction of the white light output claimed in typical brochures. But Sony 3-chip projectors shine. For every one of Sony's Z-Phosphor projectors, color light output is exactly equal to the white light output specification.