

**JVC**

# DLA-RS4500

D-ILA® Projector

with

***BLU-Escent***

Technology



DLA-RS4500

D-ILA Projector with second generation BLU-Escent Light Source

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## Second generation BLUEscent light engine

### A bit of history

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JVC successfully introduced the laser phosphor light engine in 2014 into the commercial flight simulation market used by all commercial airlines for the highest level of training used to pilots. The requirement was up to 24/7 duty cycles, long lifetime, and minimum maintenance. Lamps were the main stay at the time, but the advent of solid state light engines coming on line, the need to offer a bright, high contrast, and stable solution led JVC to match the D-ILA optics with the laser phosphor light engine. This gave the best of both worlds, the high native contrast of the D-ILA and the long life and low maintenance of the laser phosphor. JVC trademarked this as “BLUEscent”.

### What is the second generation BLU-Escent?

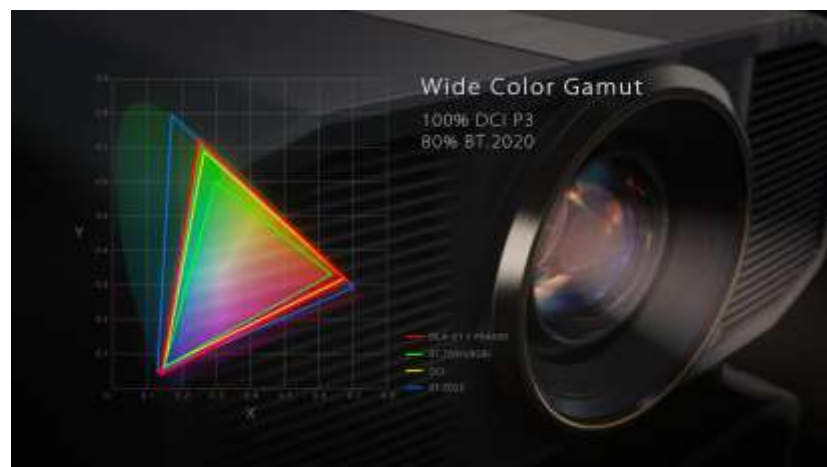
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BLUEscent is more than just a laser phosphor light engine that many manufactures have adapted. JVC’s Color Management System, CMS, takes the narrow bandwidth laser output and combines it with the wide bandwidth phosphor output to mix the perfect RGB color gamut needed for very stringent color applications. BLUEscent does NOT contain any mercury and is ECO friendly.

In second generation BLUEscent, we have added a total of 48 laser diodes to give more brightness and better frequency mixing of the laser light. This breaks up the coherence of the laser to give a more natural blue.



One of 6 banks of 8 Laser Diodes  
used in the DLA-RS4800



Then adding green and red light from the phosphor, we take the wide color gamut to the exact colorimetry need for Rec.709 or DCI-P3 color gamuts. The new CMS also allows for BT.2020 mapping to either DCI-P3 or Rec.709 color gamuts and gives 80% color space of BT.2020.

Another new feature for the new second generation BLUEscent, is a redesign of the phosphor cooling. Due to the need for quiet operation and completely enclosed light engine, the cooling has changed to a sophisticated heat pipe system, similar to those used on space satellites and high end computer chips, and is embedded into a self-sufficient heat sink to give ultra-quiet cooling and long

life performance.

The DLA-RS4500 is home quiet, gives 20,000+ hours of life on high power and delivers 3,000 Lumens of illumination. Because of the D-ILA engine, it is the highest native contrast ratio on the CI market place. With the Dynamic Control, all 48 lasers can be turned off which give zero light output. The math says  $3000L/0L = \infty:1$  contrast ratio and this can be done on a frame to frame basis. Combine that with the perfect color and you have the best projector for the High Dynamic Range, HDR, ULTRA HD content. The DLA-RS4500 will auto detect HDR10 content and automatically switch to PQ EOTF and map to BT.2020 all at a native 4K, 4096x2160, resolution.

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“BLU-Escent” is a trademark of JVC KENWOOD Corporation.

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