See more with UNISHAPE™.

- up to 40% brighter*
- at least 60% less dithering noise*
- at least 80% more colors*
- up to 100% higher contrast*

*than conventional DVE CW projection systems, depending on projector

Conventional projection systems with sequential coloring: more dithering noise, fewer colors, less contrast, less lumen output, prescribed color temperature, white wash, poor green, no pitch black.

UNISHAPE™ used with DLP® offers the best imaging quality for sequential color projection: front and rear applications, large-screen multimedia presentations, cinema projection (film and digital), and data display applications.

When good is not enough.

OSRAM UNISHAPE™ offers fascinating image quality for front and rear projection systems. More colors, more light, more contrast. See more.

Superior image through extraordinary technology.
UNISHAPE™ is designed to be the perfect supplement to sequential color projection systems and especially for DLP® technology. Using three new technologies, the light intensity is adapted to the image content with millisecond precision, similar to a waveform generator. The adapted light waveform shape is repeated in synchronization with the DMD and color wheel. Through precise dosage of the light, UNISHAPE™ increases the efficiency of the overall system while simultaneously improving image quality.

Until now different data projectors were needed for professional presentations and home video projectors for private use. With UNISHAPE™ it is now possible to get outstanding image quality in all situations with one and the same device, no matter whether it is used professionally or at home. In

short: OSRAM UNISHAPE™ offers excellent technology for front and rear projection – quality that you are used to getting from OSRAM products.

Highly flexible –
OSRAM UNISHAPE™ adapts to the product.
UNISHAPE™ lamp drivers are already factory-equipped with an RGBRGB waveform. In cooperation with Texas Instruments, OSRAM also offers the option of creating a waveform adapted precisely to the characteristics of your product. The lamp driver can store multiple waveforms, from which the consumer can choose (e.g., between high brightness data mode and superior color video mode). Another advantage: The data of the customized waveform can be loaded to the lamp driver before, during, and even after installation via a UART interface.

Other advantages at a glance:
• works with standard and most advanced color wheels
• replaces the need for a mechanical aperture
• allows smaller system designs
• saves expensive seven-segment DVE color wheels
• UNISHAPE™ firmware updates are possible anytime, even in the assembled projector
• all OSRAM PT VIP lamp drivers are capable of UNISHAPE™ operation
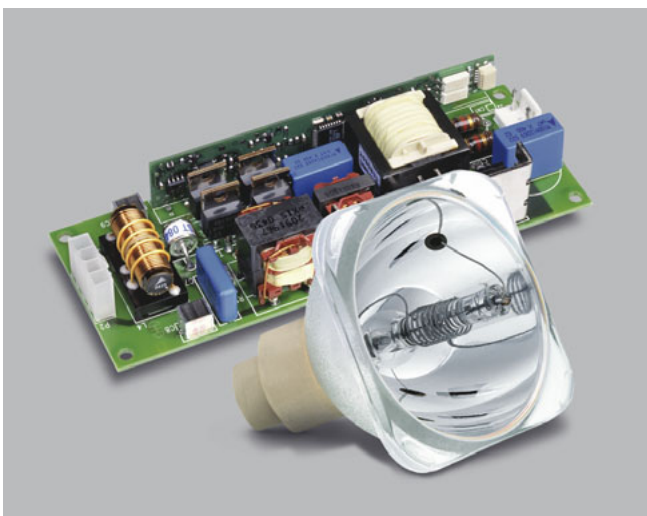
UNISHAPE™: a strong trio. Lamp, driver, and integrated software provide optimal system performance and imaging quality.

## Three techniques, one goal – the best output.

The advantages of UNISHAPE™ are made possible above all by three innovative technologies. Through their dynamic application, they get the best out of any device – in any situation.

Variable Plateau

This is the solution to the problem that the brightness of the image is reduced in existing technologies due to color correction and dark video enhancement. UNISHAPE™ counteracts this effect by adapting lamp output dynamically to the color wheel segment.

- up to 40% brighter image*
- flexible color correction
- loss-free adjustment of white point
- full digital control

* compared to DVE colour wheel system
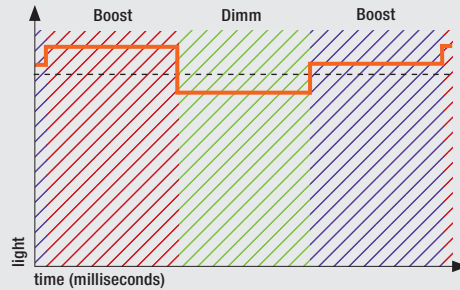
Low Pulse

Above all, UNISHAPE™ microsecond-precision reduction of light power adapted to the image delivers more colors and better color gradation. Each 50% low pulse doubles the number of true colors and halves the dithering noise.

- increases color bit depth
- more colors (1–2 additional bits per color possible)
- improved color gradients
- effective image improvement of dark frames
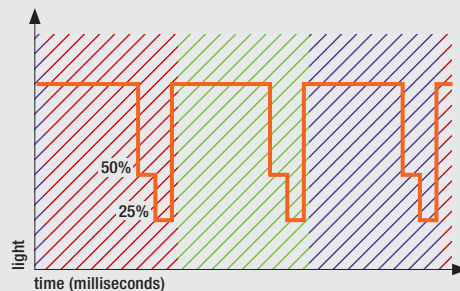
Dynamic Dimming

Especially for dark scenes, conventional technologies have the problem of unsatisfactory color reproduction and contrast. UNISHAPE™ with dynamic dimming adapts with millisecond precision to the differences in brightness in the image. That leads to greater contrast and a "blacker black."

- up to 43% more colors in dark scenes*
- higher contrast ratio*
- replaces the need for mechanical aperture
- allows smaller projector designs

* in comparison to projection systems without light modulation
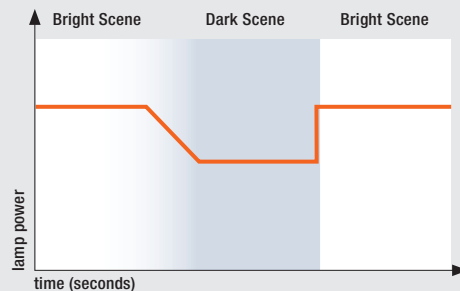
Get a more detailed look at OSRAM UNISHAPE™ at www.osram.com/unishape.

SEE THE WORLD IN A NEW LIGHT

OSRAM