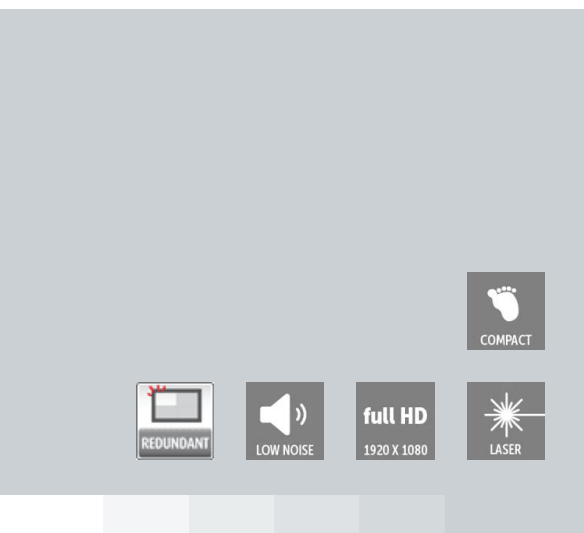# RGB Laser ODL-821

80" laser-lit rear-projection video walls for 24/7 control rooms

- **1.5x more brightness than mainstream 80" LED-lit rear-projection video walls**

- **25% less power consumption at higher brightness levels**

- **More than 11 years of uninterrupted operation in 24/7 mode**

- **Unmatched colors, focus, and contrast levels**

- **Lower price/m2 (compared to 70" cubes)**

- **Silent like never before ('library' noise level)**

- **Redundancy of critical components for ultimate peace of mind**

- **50% setup-time reduction (motorized 7-axis alignment)**

Powered with the latest laser technology, Barco's RGB laser rear-projection video walls delivers unseen brightness levels and vibrant colors, while offering a very low total cost of ownership (TCO). With its 10th generation of rear-projection video walls, Barco again raises the bar for critical infrastructure visualization.

Providing 1.5x more brightness than mainstream 80" LED-lit rear-projection video walls, the RGB Laser series removes all brightness issues of earlier video walls. The high luminance allows operation under daylight conditions, so control rooms can finally light up - which improves operator working conditions! Adding vibrant colors to this mix (making all nuances clearly distinguishable), ensures that nothing is wrongly interpreted and situational awareness is enriched. What's more, using 80" cubes results in a lower price per square meter and less seams for the large video wall.

Over 11 years of uninterrupted 24/7 operations

With the RGB laser for 24/7 control rooms series, Barco takes another giant leap forward in terms of reliability. With a light source lifetime of at least 125,000 hours in both normal and eco-mode, and redundancy of all critical components (including power supply, inputs, and laser drivers), nothing is left to chance when it comes to uptime. Unlike technology used by others and for non-24/7 environments, Barco's RGB laser display series doesn't need a rotating color wheel to operate. Since each color can be uniquely controlled and is not dependent on the segment of a color wheel, it provides color control like never before and eliminates color breakup.

Automatic calibration and alignment

The engine of Barco's RGB laser for 24/7 control rooms is fully motorized. Installers and maintenance staff will never need to open up the individual modules to perfectly align the individual cubes of the video wall. Using a web interface, the video wall can be remotely aligned by a single technician - including keystone correction. Combined with the Sense X automatic calibration system, which continuously measures and adjusts brightness and color levels over the complete video wall, users are sure the complete canvas is perfectly balanced at any time.

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Product specifications	**RGB LASER ODL-821**		
General specifications			
Resolution	Full HD (1920 x 1080 pixels)		

On-screen brightness (under native color gamut)	Mode	Brightness	Light source lifetime (hrs) Power usage (W)
	Boost	500 cd/m²	60,000 260
	Normal	390 cd/m²	125,000 200
	Eco	195 cd/m²	125,000 120

On-screen contrast	1800:1
Screen	BBP Horizontal half gain viewing angle: 30° Vertical half gain viewing angle: 30°
Color	Up to 170% REC709 color triangle
Display technology	Rear projection DLP (rear access only)
White point	Customized white points
Brightness uniformity	Typ. >95% ANSI 9 Typ. >90% ANSI 13
Screen gap	Hor: 1.2 mm, Vert. 0.8 mm (@ 25°C)
Color stability	Sense X automatic calibration
Dimensions	• Diagonal: 80" (Approx.) • Width: 1,760 mm | 69.29" • Height: 990 mm | 38.97" • Depth: 730 mm | 28.74" • Weight: Projection Module: 65.5 Kg | 144.4 lbs • Weight: Support frame (1m): 42 Kg | 92.5 lbs
Light source	RGB lasers illumination (Lasers Class 1 RG2)
Redundancy	Redundant laser banks with redundant power supply drivers, input signal & external power supply
Light source lifetime	> 125,000 hrs in both Normal and Eco mode
Noise Level	Less than 20 dB (measured from 3 meters in front)
Conditions for operation	10°C-40°C | 50°F-104°F Up to 80% humidity (non-condensing)
AC input voltage	100 – 240 VAC, 50-60Hz
Power	120W (eco) 200W (normal)
Heat dissipation	390 BTU/h (eco) 680 BTU/h (typ) 860 BTU/h (max)
Connectivity	2x DP1.2 inputs & 1x output (4K@60Hz) 2x HDMI™ 2.0 inputs (4K@60Hz) 2x USB ports (only for power) 2x Ethernet ports
Signal processing	Loop through Cropping, scaling with wall configuration
Direct ethernet access	Built in web server
Graphical user interface	All settings and operational parameters
Integration to third party equipment	WEB service API
Warranty	2 years

Last updated: 16 May 2024

ENABLING BRIGHT OUTCOMES

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