# SIM 7 series

# High-resolution simulation projector with no speed limits



- Optimized for multi-channel visualization
- Smear-free operation
- Advanced, zero frame delay warping
- Extended contrast for accurate night/dusk training
- Motion-base simulator compatible
- Stimulated NVG capability
- Enabled for automated alignment

Barco's SIM 7 series projectors push the envelope of visualization technology to provide extremely realistic simulation. The Barco SIM 7 series is equipped with the industry's latest and fastest switching LCoS (Liquid Crystal on Silicon) technology, which delivers nothing less than razor sharp, no-smear images for high-speed motion and other simulation applications.

The Barco SIM 7 series is optimized for multi-channel visualization to provide exceptional contrast, unmatched dynamic range, seamless image blending, and outstanding performance. Specially developed to meet the real-world demands of commercial and military flight training and mission rehearsal scenarios, the Barco SIM 7 series can be easily integrated into simulation systems with spherical, curved, or flat projection surfaces. If your training applications require visual simulation that is highly realistic, the Barco SIM 7 series give you the best image quality known today, with no speed limits.



## Barco's SIM 7 doesn't sacrifice speed for realism - it has both

# Optimized for high-resolution, multi-channel visualization

The SIM 7 comes equipped with various Barco engineered technologies that make it ideal for multi-channel simulation projection:

- Optical and electronic edge blending eliminate overlap zones where projections converge, to create one seamless image.
- Linked constant light output (CLO) guarantees the same brightness levels for the entire composite image
- DynaColor and gray level definition ensure accurate color matching and gradient color definitions across the multi-channel system.
- Warping enables correct, undistorted projection without frame delay and loss of pixels on a curved or spherical screen.

### True smear-free operation

Thanks to Barco's display optmizations and the system's fast refresh rates, the SIM 7 produces high-quality images on par with CRT technology - but at a much lower price. This renders the SIM 7 the next-generation projector of choice for fast-jet training and other visually intensive simulation applications.





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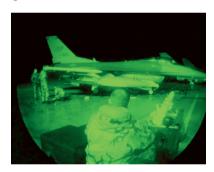
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### High contrast, deep black levels

Barco's contrast-enhancing features in the SIM 7 make it possible to simulate **true black levels** and attain levels of color gradience as close to a real-life experience as possible. The SIM 7's dynamic contrast ratio can be enhanced to up to 2,000,000:1, which is offered by no other competitor in the industry.

### **Stimulated NVG capability**

As today's combat scenarios take place during night, having pilots fully trained to fly under these conditions is necessary for survival. Barco's night vision goggles (NVG) optimization lets you use the SIM 7 series projectors for true, realistic NVG stimulation with ultra realistic blooming and halo night vision effects. This technology is compatible with any current generation of NVGs.



### Motion simulator compatibility

The Barco SIM 7 can be equipped with a motion-base compatibility option, and it is ruggedized to withstand the high G-forces of motion vibration.

### **Enabled for automated alignment**

Quickly and easily setup your multichannel SIM 7 display system with Barco's advanced automated alignment system and remote display controller.

# Brightest LCoS simulation projector on the market

While other LCoS projection technologies typically operate at 25% brightness capacity, Barco's SIM 7 works at 100% full brightness when its contrast-enhancing and smear-reducing options are disabled.

#### SIM 7 series

The SIM 7Q and 7D display a three megapixel QXGA resolution, while the SIM 7D includes the unique, "**twin warping**" technology - the industry's finest geometry correction function - to preserve all detail in images. Barco's SIM 7QP and DP offer projection in **portrait mode**, enabling a much higher vertical field of view compared to traditional solutions.

	SIM 7Q	SIM 7D	SIM 7QP	SIM 7DP
Resolution	QXGA (2048x1536)		1536x2048	
Aspect ratio	4:3		3:4	
Contrast ratio	high dynamic contrast ratio up to 2,000,000:1			
Latency	down to 2ms			
Warping	gen 3 WARP	TwinWarp	gen 3 WARP	TwinWarp

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