

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.

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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 optimizations 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.



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 multi-channel 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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