A vision to trust

Rock-solid and powerful: the FL40 simulation projector series



Projectors that deserve your trust

Developed by Barco's experienced engineers of high performance simulation projectors, the FL40 series is designed from the ground up to be a rock-solid projector for demanding simulation applications. Whether it is for training in air, at sea or on the ground, preparation for real life action requires the best training conditions possible. This is why the new Barco FL40 series is designed with exceptional color fidelity and razor-sharp imagery for nonstop 24/7 operation. Even in the most extreme environments the FL40 delivers a vision to trust.



Visuals that deliver

The FL40 is a native WQXGA projector with pixel shift capabilities up to 4K (3,840 x 2,400) resolution. It allows trainees to detect moving objects at long distances, totally immersing them into the perfect simulation experience. The 4K output resolution is achieved through proprietary Barco Single Step Processing (SSP®) technology – a unique feature of the powerful and flexible Barco Pulse software platform. The FL40 with SSP® delivers excellent images faster and at lower latency than any other competing technology.

True solid state for lowest TCO

Using the latest in HLD and LED illumination technology with a proven DLP light engine, the FL40 offers excellent brightness and color fidelity, combined with extreme lifetime. Thanks to the Constant Light Output (CLO®) functionality you achieve total predictability in linear brightness performance and lifetime over the life of the projector. As a true solid state projector with no moving components, maintenance or lamp change is not required over the projectors lifetime of 50,000 hours*, minimizing the TCO.

Designed for motion platform operation

The rapid sudden movements on a motion platform are a challenge to any projector. The FL40 is a true solid-state projector with no moving mechanical parts inside. Its solid magnesium front and baseplate, itself acting as mounting plates, coupled with an ample number of mounting points in the front and on the top, make this projector sturdy as a rock no matter which direction the force is coming from.

Barco Pulse – the beating heart of the projector

The FL40 is built on the proprietary Barco Pulse software platform. The powerful and flexible architecture of Barco Pulse allows for advanced low-latency processing operations designed to take place in just one single step – a huge advantage in a real-time processing environment.



Regardless of resolution or the degree of geometry correction, image latency is always kept to a minimum. By granting access to our API we can also enable partners to integrate custom management tools and value-add features to complement the projectors software. Barco Pulse is therefore the ultimate tool to make any system future-proof and scalable.

Direct F-series retrofit with legacy platforms

Barco engineers have put much focus and attention to easy replacement of earlier Barco platforms, including the F35, FL35 and FS35. The FL40 uses the same series of lenses and is designed with mounting points to position the optical engine in the exact same location as on the F3x product platforms. This means focus and throw ratio will remain exactly the same when updating F3x installations with the FL40 series. Additional mounting points are accessible in front, on the top and the bottom, making an upgrade economical and simple.

Barco, at your service

A worldwide team of Barco service engineers is available around the clock. All service and support questions are handled with the necessary urgency to ensure your system's uptime – and your commitments to your staff and customers. Our projectors are designed for 24/7 operation with a full 3-year warranty. Optional warranty of 5 years is available for added peace of mind.





FS40: For NVG stimulation

Extending the FL40 series, is the FS40 which offers NVG stimulation through a dedicated IR LED in addition to the RGB LEDs used in the FL40. Both the IR and the RGB LEDs have adjustable intensity. For a seamless transition throughout the time of day, an optical dimming filter allows intensity adjustments from 100-0% brightness. Dual input support for simultaneous IR and RGB content up to WQXGA @120 Hz allows for individual image adjustments in both the day-time and the night-time scenes, adding to a more realistic and immersive training experience.

High-performance projection for any simulation application

Designed for demanding simulation applications, the FL40 can be applied in all training environments. From flight training for civil aircraft, high-speed jet aircraft and helicopters, to vehicle training, and ship-bridge simulation, the FL40 gives you the performance you need to get the job done.



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