

Redefining the limits of reality

F70 series: 4K UHD laser phosphor projectors for simulation



Displaying reality – and more

The ultimate simulation experience mixes true-to-life images with challenging, real-world scenarios to create a training environment that takes people beyond the boundaries of reality. Only then can trainees truly prepare for the challenges they might face in the line of duty. Barco's F70 series offers the exceptional image quality, the trusted reliability, and the dedicated extra features to fully immerse trainees in the simulated environments – on land, on sea, or in the air.

Redefining the limits of lifetime

With a lifetime of up to 60,000 hours (depending on the mode of operation), the F70 is one of the most durable projectors on the market. So, your investment will pay off longer. Furthermore, because there's no need for lamp replacement, the minimal maintenance requirements ensure very few interruptions, resulting in low Total Cost of Ownership (TCO). To further prolong the lifetime of the light source, you can set your desired brightness level from the start, and the projector will maintain that image quality – both brightness and color – over time. In this way, you can extend the lifetime of the laser-phosphor source beyond the 20,000 hours that are typical for laser phosphor illumination run at 100% brightness.

Built for motion platforms

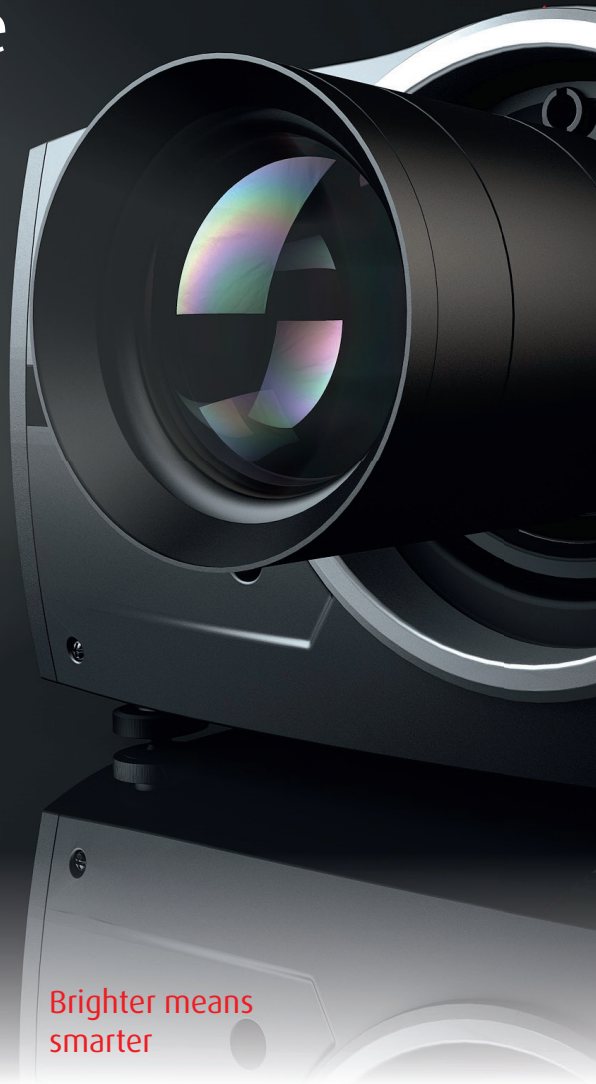
The rapid sudden movements on a motion platform are a huge challenge to projectors. That's why products that weren't designed for such harsh and taxing environments don't last long and require frequent and expensive maintenance. Built with simulation applications in mind, Barco's F70 is fitted with metal armor surrounding the entire projector – ensuring the model's robustness and making it the perfect choice for motion platform mounting.

Brighter means smarter

With brightness levels in simulation configurations of up to 5,000 lumens, the F70 is one of the brightest single chip DLP projectors on the market with 4K UHD resolution. This means you not only get minute details, but also the matching brightness to clearly see every single aspect of the simulation scene. Additionally, with a brightness budget of up to 5,000 lumens, you have great flexibility in using any excess brightness for extending the lifetime of the illumination or to tune the contrast levels to match the application's requirement.

FS70: Enhanced Infrared (IR) goggle stimulation

In addition to the F70, there is also the dedicated FS70 which features enhanced IR goggle stimulation through a dedicated IR illumination source. Designed specifically for training during dawn, day, dusk, and night, the FS70 offers the latest infrared technology – ensuring an extremely realistic Night Vision Goggle (NVG) training experience – as well as dimming possibilities ranging from 0-100% to ensure optimal training at any time of day.





Always ready to (out)perform

The F70 is designed to perform at all times. With the Constant Light Output (CLO®) functionality, the projector produces constant brightness and color over an extended period of time. Add the extremely rugged design and the unique cooling system, and you have a product that performs throughout its lifetime, in harsh environments, even when operated 24/7.

Redefining the limits of simulation

Unlike many projectors on the market that have a wide range of uses, the F70 was specifically designed for simulation purposes. For example: the extreme ruggedness allows use on a motion platform, the smear reduction improves the images in a high-speed setting, and the dual input WQXGA @120 Hz allows either 3D stereoscopy with high quality, High Frame Rate (HFR) or dual input of IR and RGB content. All of which contribute to a more realistic experience.



The widest range of lenses

Barco's complete F-series projector range includes 100% lens compatibility. This means that, in addition to the wide range of all-glass lenses that are already available, customers can re-use their legacy lenses. So, in addition to high flexibility, you safeguard your past investments.

Redefining the limits of image quality

Thanks to Barco's unique and proprietary Single Step Processing (SSP®) technology, the F70 outputs 4K Ultra High Definition (UHD) resolution in only one step. The great advantages of performing this procedure in just a single step include achieving a sharper image and much higher overall image quality with fewer artifacts and less latency. Furthermore, the projector's advanced optical design is engineered to micro-precision: dual iris and optical filters ensure better contrast and higher black levels, and high-quality lenses further guarantee a perfect on-screen image with exceptional colors.

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.

High-performance projection for any simulation application

Designed for demanding simulation applications, the F70 can be applied in all training environments. From high-speed flight training, to vehicle training, to ship-bridge simulation, the F70 gives you the performance you need to get the job done.



Flight training



Vehicle training



Ship-bridge simulation

M00598-R00-1116-PB November 2016

The information and data given are typical for the equipment described. However any individual item is subject to change without any notice. The latest version of this brochure can be found on www.barco.com. All specs mentioned in this brochure are in accordance with ISO 21118 standards.