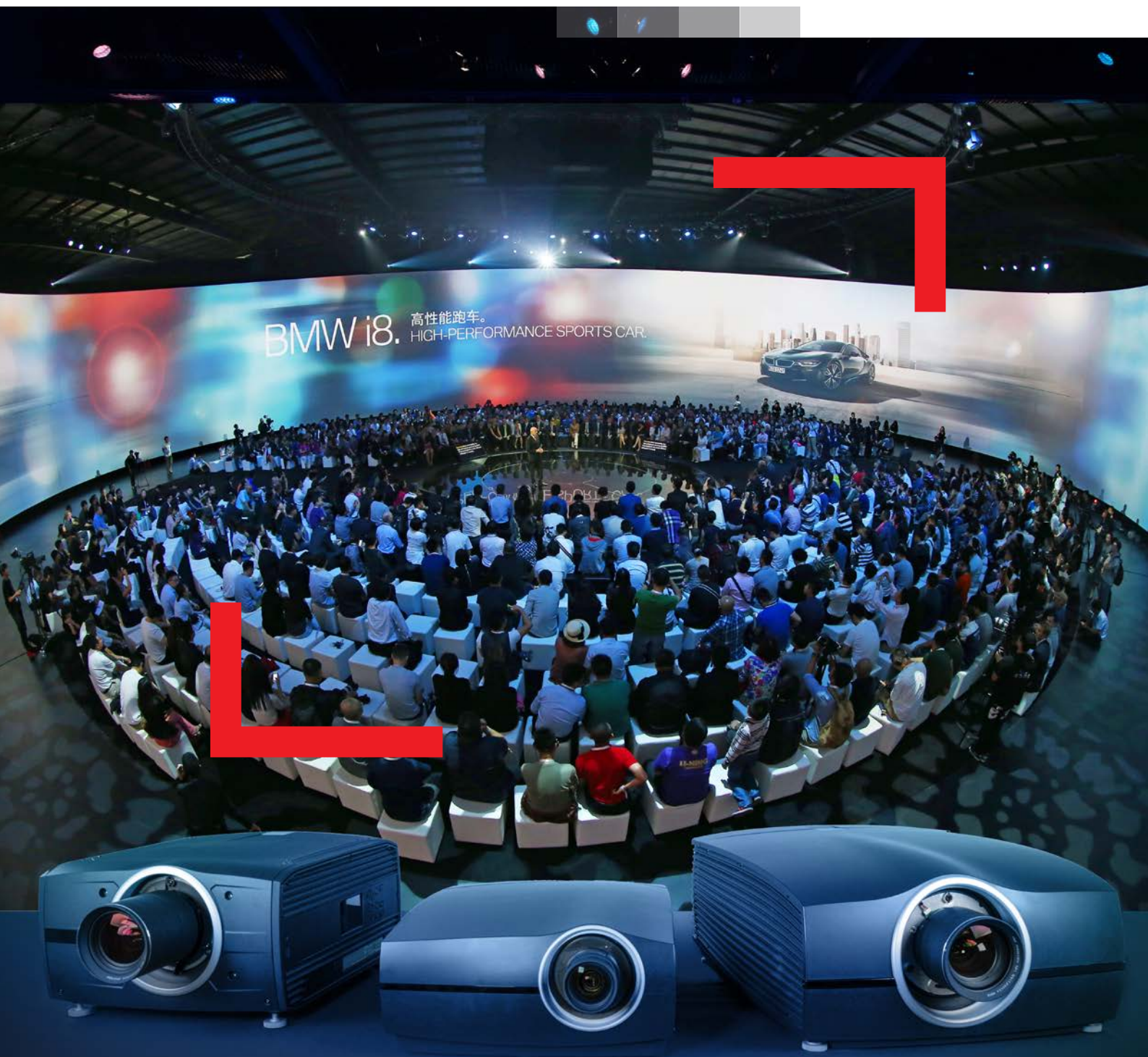


F-series

Laser projectors for visitor attractions, venues and events that take your breath away





Think of three things you need to put on breathtaking shows that thrill audiences and delight your customers. Our guess is that freedom, flexibility and 4K are high on that list.

Freedom

The F series frees you from many of the constraints of working with projectors. They are all **compact**, so you can more easily set them up. The **long lifetime** of laser and light sources require less maintenance. The solid-state light source enables fascinating new possibilities due to **360° orientation**. As they share the same Barco's powerful Pulse electronics, the F70, F80 and F90 **are easy to use**.

Flexibility

Museums, auditoriums, training and simulation require high levels of flexibility – notably during installation. With a choice of resolutions – WUXGA, WQXGA and 4KUHD – the F series provides that, along with high brightness and color options. These ensure the most accurate color performance even at the highest brightness levels.

4K

The F70, F80 and F90 were all designed from the ground up to offer effective 4K solutions. Barco Pulse, the 4K electronics backbone, offers an intuitive interface and flexible, user-friendly, embedded control software. Its unique Single Step Processing (SSP) technology enables our projectors to achieve 4K Ultra High Definition (UHD) resolution in only one step. This results in a sharper 4K image, less latency, and less dark time than comparable solutions on the market

A projector for every need



F70

The Rugged F

F80

The Silent F

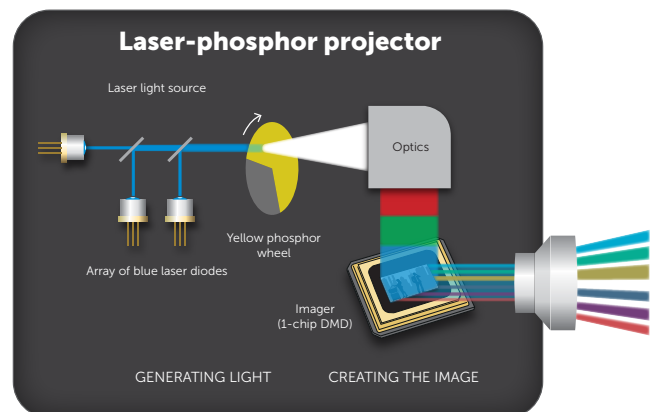
F90

The Bright F

Crisp images, easy operation – year after year

There are more important things to do in your day than babysit equipment. Barco's projectors are designed specifically to provide breathtaking, life-like images for visitors. Build compelling experiences that draw on Barco Pulse – our powerful single-step processing that offers the best of 4K even when warping or blending is required.

The phosphorous light source also significantly reduces the time and money you spend on maintenance and replacement. So for the F70 and F90, you can expect up to 60,000 hours of worry-free projection.



The F70 series

Rugged performance



The F70 was specifically built to offer superb performance in demanding environments such as museums, theme parks, auditoriums, and science centers. Audiences can now be given compelling experiences that leave a lasting impression. Its motion platform compatibility makes it perfect for theme park dark rides.

The razor-sharp, detailed images at 4K UHD resolution and saturated colors are supported by **Constant Light Output (CLO™)** that guarantees constant brightness and color for a long time span. Its DLP technology, advanced cooling, and rugged design make the F70 is a reliable, long-lasting projector.

F70-W8

WUXGA resolution

Up to 8,000 lumens

60,000 hours lifetime

F70-4K8

4K resolution

Up to 8,000 lumens

60,000 hours lifetime

The F80 series

Vivid colors, very low noise



©Photos Anaka/La Cité du Vin/XTU architects

The F80's stunning image quality and laser light source enable you to provide really stand-out experiences, while saving both time and money. Designed for fixed installations such as museums, boardrooms, and auditoriums, their 3D capability also excels in theme park dark rides and interactive experiences.

The highly-detailed 4K UHD images make no compromises on color to achieve brightness, while Barco Pulse and Single Step Processing reduce latency. Advanced cooling design extends the operating lifetime; the lack of lamps saves on maintenance and consumables. And in terms of flexibility, all-glass lenses and wide shift ranges accommodate almost any projector configuration.

To achieve the **low noise performance**, Barco made optimal use of the unit's internal space. The increased cooling surface enabled the fan speeds to be reduced dramatically resulting in much lower noise. Barco also turned to advanced noise inspection tools, using noise cameras and spectrum analysis to optimize the noise timbre.



F80-Q7

F80-4K7

F80-Q9

F80-4K9

WQXGA resolution	4K resolution	WQXGA resolution	4K resolution
7,000 lumens	7,000 lumens	9,000 lumen	9,000 lumen
40,000 hours lifetime	40,000 hours lifetime	40,000 hours lifetime	40,000 hours lifetime

The F90 series

Built for brilliance



With a **brilliant 13,000 lumens**, Barco's F90 projectors enable you to provide stunning experiences while saving both time and money. Designed for everything from high-demanding visitor attractions to simulation applications that require 24/7 operation, the reliable F90-W13 works just as well in events, retail and advertising as it does in boardrooms and auditoriums. Its 3D functionality also makes it a perfect fit for theme park dark rides and interactive experiences.

F90-W13

WUXGA resolution

13,000 lumens

60,000 hours lifetime

F90-4K13

4K resolution

11,800 lumens

60,000 hours lifetime

Getting the most from the F series

Flexibility is one of the keywords with the F series. You need it to deal with the many situations you face – and the vast range of solutions you can provide. Get more from the F series by calling on:

Wide range of lenses

- **All-glass FLD(+) lens range for the F70, F80 and F90**
Not only do they provide better images, FLD lenses also extend what you can achieve with the F series
- **More compact and optimized GLD lens range**
Designed specifically to give the best results for the F80

Flight cases

Protect your investment when travelling

Rental frame

Ensure long-life operation for rentals

Dust and smoke filters for demanding environments

Extend the quality and life of your projector

Training: Barco University, Best in Class, First in Business.

Make sure your installers and operators know how to get the very best from your F series



Why do we prefer DLP® technology?

Barco believes in DLP as the technology of choice for stable, high-quality performance in high-brightness applications. Why? By design, DLP is best suited for high-brightness applications as it copes with high energy levels. DLP panels use mirrors, so the majority of the light/heat is reflected and not absorbed – as opposed to other transmissive technologies such as LCD. In addition, the DLP panel can be more efficiently cooled through liquid cooling which further improves stability and lifetime. Consequently, DLP is also better suited in combination with laser phosphor illumination.

In addition to resisting heat, the color uniformity of DLP does not change over time, as there are no organic components to degrade. It's easy to seal against dust and the information transmitted by one pixel does not influence the neighboring ones.

Why do we choose laser phosphor illumination?

Xenon illumination has been the standard for high brightness levels and great colors in large venue projection. By making the right design choices, Barco is now able to meet the color performance of Xenon, while providing the benefits of solid-state illumination:

- Longer lifetime and constant brightness over time
- Higher optical efficiency
- Flexible installation orientation
- No image flicker or sudden lamp failures (inherent redundancy)

Laser phosphor delivers the benefits of solid-state illumination in a cost-effective and compact way, which is required for the live events and large venue market applications. In cinema – where the size of the projectors is significantly larger – Barco uses RGB laser illumination for even better colors. We also supply the simulation business.

Read our white papers on www.barco.com/UDX for more in-depth info on these topics.