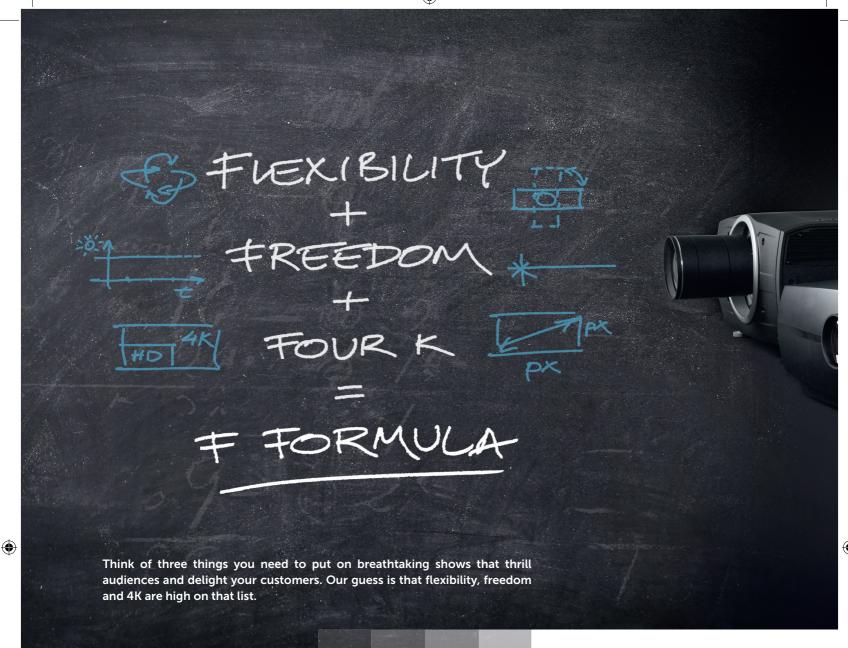


F-series

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







Flexibility

Theme parks, museums, planetariums and auditoriums 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.

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**.

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



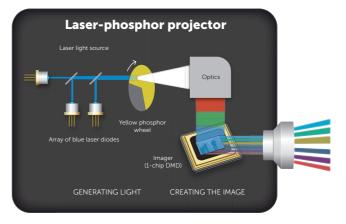


Crisp images, easy operation – year after year

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.

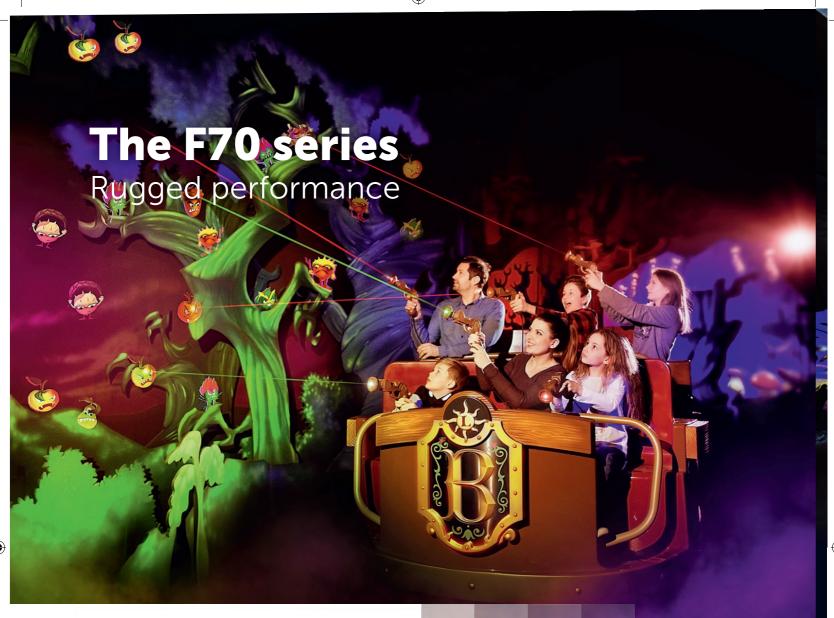
The phosphorous light source also significantly reduces the time and money you spend on maintenance and replacement. So for the F70 and F90,

you can expect up to 60,000 hours of worry-free projec-









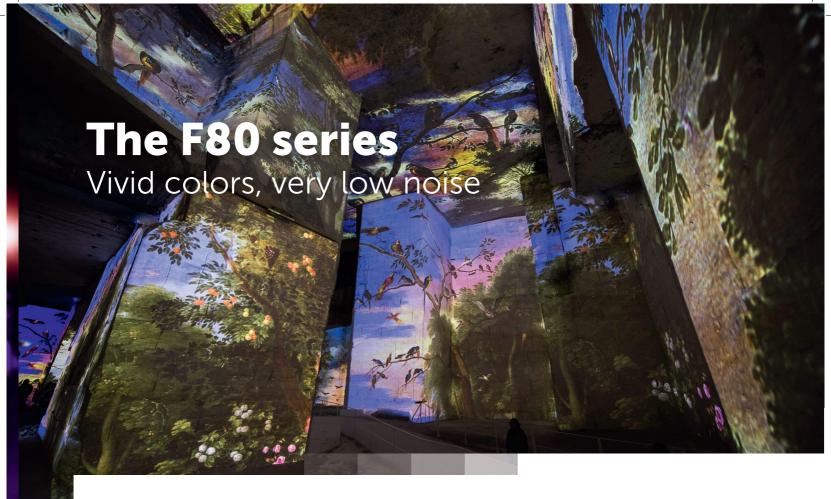


The F70 was specifically built to offer superb performance in demanding environments such as museums, theme parks, auditoriums, and science centers. Audiences can now be given compelling experiences that leave a lasting impression. Its motion platform compatibility makes it perfect for theme park dark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

The razor-sharp, detailed images at 4K UHD resolution and saturated colors are supported by **Constant Light Output** (CLO^{TM}) 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 | F70-4K8 |
|-----------------------|-----------------------|
| WUXGA resolution | 4K resolution |
| Up to 8,000 lumens | Up to 8,000 lumens |
| 60,000 hours lifetime | 60,000 hours lifetime |
| | |





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. The advanced cooling design extends the operating lifetime; and the lack of lamps saves on maintenance and consumables. 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 | F80-Q12 | F80-4K12 |
|--------------|--------------|--------------|--------------|---------------|---------------|
| WQXGA | 4K | WQXGA | 4K | WQXGA | 4K |
| resolution | resolution | resolution | resolution | resolution | resolution |
| 7,000 lumens | 7,000 lumens | 9,000 lumens | 9,000 lumens | 12,000 lumens | 12,000 lumens |
| 40,000 hours | 40,000 hours |
| lifetime | lifetime | lifetime | lifetime | lifetime | lifetime |







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 | F90-4K13 |
|-----------------------|-----------------------|
| WUXGA resolution | 4K resolution |
| 13,000 lumens | 11,800 lumens |
| 60,000 hours lifetime | 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
- Ultra Short Throw lens for the F70 and F90
 Offering the world's shortest throw ratio (0.28:1), you can create a much larger image or a more compact installation
- 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

You can easily stack and hang your projector with this frame. The single-point clamp allows you to flexibly rig your projector with just one attachment point. With 25° tilt and 360° rotation you can freely adjust projector position.

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 ${\sf F}$ 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.

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

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