UDX series
Laser phosphor high-brightness projectors for large venues and events
UDX. Unbelievable

More and more, we want to be wowed by unique and unbelievable experiences. That’s why events and venues require dazzling, high-resolution images. Together with our key customers, we created a game-changing projection platform.

The UDX series is the most compact high-brightness laser projection platform with integrated cooling on the market. With a range up to 45,000 lumens, it enables rental companies and venue owners to provide stunning experiences while saving both time and money.

Choose for the future today – and reap the benefits for many years to come.

Unbelievable performance

Thanks to their advanced optical design, the UDX projectors deliver razor-sharp, high-resolution images with up to 4K UHD resolution and up to 45,000 lumens. Moreover, the Constant Light Output (CLO) functionality guarantees constant brightness and color over time. Equipped with 3-chip DLP® technology and a high-contrast optical engine, the projectors excel in brightness, color accuracy, and stability. So, you can guarantee a flawless performance at all times. Moreover, it reuses our existing TLD+ lens range, offering an unparalleled lens shift of up to 130% up and down without loss of image quality.

Unbelievable colors

Compared to other laser phosphor projectors, the UDX platform offers the widest color spectrum in the industry. At full brightness mode, the UDX color quality matches the renowned Xenon quality of our HDX and HDF series and outperforms the Rec. 709 color space. This allows for an accurate color reproduction at all times. While laser illumination gives more freedom to trade off colors to boost brightness, Barco doesn’t compromise on color to reach high brightness.

Unbelievable reliability and serviceability

With the UDX, you increase uptime while driving costs down. Thanks to their laser phosphor light source, lamp-related costs and maintenance as well as image flicker belong to the past. They deliver a long lifetime and a high reliability to ensure minimum downtime. In addition, the UDX is fully modular too. Its building blocks can be quickly removed and replaced so that the time you spend on servicing your projector is kept to a bare minimum.
The UDX helped us exceed audience expectations and reduce the amount of time needed for setup.

David Barton
Group Head of Video, Hawthorn

Unbelievably easy to ship and set up

Thanks to its compact and rugged design, the UDX also enables you to reduce your shipping and labor costs. They’re the most compact, high-brightness laser projectors for events and large venues on the market. That’s why they not only make shipping and transport easier, their flight cases take up less space in your truck too. Rigging and stacking? Done in a breeze, thanks to the truss shaped frames.

Unbelievably flexibility

Increase your ROI and maximize the utilization of your projector fleet with the help of our smart peripherals. The motorized rental frame offers an easy and safe solution for stacking and hanging projectors, allowing for quick remote adjustments. While the Camera Distance Meter saves you crucial time during installation.

The UDX platform also comes with Barco’s unique FLEX² feature, which allows you to tune and lock brightness and resolution for a specific show. This way, you need fewer projectors to cover a wider range of brightness levels and resolutions.

Unbelievable processing with Barco Pulse

The beating heart of the UDX projectors? That’s the Barco Pulse processing! Barco Pulse is the 4K electronics backbone that’s integrated in all new projection platforms. It offers an intuitive interface and flexible, user-friendly, embedded control software. Its unique Single Step Processing (SSP) technology enables our projectors to perform warping, scaling and achieve 4K Ultra High Definition (UHD) resolution in only one step. This results in a sharper image with simulation warping capabilities and market-leading lowest latency.

Through Barco’s DynaBlack ultra-fast processing and laser pulsing, the UDX projectors can increase the overall dynamic contrast range by making darker scene’s darker without any processing latency, which is crucial in today’s projectors, especially with HDR content.

What’s more, Barco’s Pulse electronics share the same modular design philosophy as the projectors. So, your device is future-proof, and you can tap into the latest features at all times.

Unbelievable projector management

The Barco Insights Management Suite, our cloud-based solution for remote fleet management enables real-time operating info and remote log file access for faster and more effective problem diagnosis. The data can easily be combined with your own tools and current processes. Efficiency, reliability and flexibility at the core of your rental fleet. Anywhere, anytime.

Barco’s Insights Management Suite is based on a subscription model with three levels: Monitor, Diagnose and Control. Monitor features are automatically embedded in Barco’s UDX series and can be extended and upgraded whenever you want to benefit from the extra options and possibilities.
Meet the unbelievable family

The UDX range combines high performance in a compact and rugged design. This family of eight models brings colorful, razor-sharp and high-brightness images to every type of event or venue.

UDX-W26 | UDX-4K26 | UDX-W32 | UDX-4K32
--- | --- | --- | ---
LIGHT OUTPUT | 26,000 lumens | 26,000 lumens | 32,000 lumens | 31,000 lumens
RESOLUTION | 1,920 x 1,200 | 3,840 x 2,400 | 1,920 x 1,200 | 3,840 x 2,400
CONTRAST RATIO | 2,200:1 | 2,200:1 | 2,200:1 | 2,200:1
BARCO DYNABLACK | 20,000:1 | 20,000:1 | 20,000:1 | 20,000:1
ASPECT RATIO | 16:10 | 16:10 | 16:10 | 16:10

UDX will revolutionize the way we work, now and into the future.

Danny Whetstone
Founder and President, DWP Live
The UDX-4K40 is the brightest projector on earth below 100 kg. It’s a game-changer for a lot of rental houses.

Alexis Skatchkoff
Product Manager, Barco

<table>
<thead>
<tr>
<th>Model</th>
<th>Light Output</th>
<th>Resolution</th>
<th>Contrast Ratio</th>
<th>Aspect Ratio</th>
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<tbody>
<tr>
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<td>39,000 lumens</td>
<td>1,600 x 1,200</td>
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<td>UDX-U45 LC</td>
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The legacy continues

For years, Barco has been leading the large venue and events industry with its renowned HDX, HDF, and HDQ projector platforms – bringing pristine images to the greatest shows around the world. We know from experience how demanding live events are. So, we’ve developed our projectors to be your ultimate tools for creating the most astonishing shows.

Powerful event workhorses that excel in image quality, reliability, and modularity, the HDX, HDF, and HDQ ranges have a strong reputation in the rental and staging industry.

The UDX is set to continue their legacy, now and well into the future.
The impressive capabilities of the Barco projectors created the wow factor we were after!

Sha Xiaolan
Chief producer of lightning and fireworks show

Trust in what you already know

Why change the things you like and trust? We’ve integrated the acclaimed features of our HDX, HDF, and HDQ projectors into the UDX platform.

Reuse your lenses

If you already own a Barco large venue projector, you can simply reuse the lenses on the UDX projectors. There’s no need to replace your existing lens fleet or invest in new lens gear. If you’ve selected our high-quality, glass TLD+ lens range with variable throw ratio in the past, you can reap the benefits from your investment again. And through their unparalleled lens shift of up to 130% up and down, the UDX projectors accommodate a wide range of configurations.

Masters in modularity

All around the globe, rental houses and venue owners have praised the modularity of the Barco large venue projectors. The UDX projectors continue this design philosophy. Their clever, modular design ensures fast and simple maintenance and maximum uptime.
Why we selected DLP® technology?

DLP is Barco’s preferred technology for stable, high-quality performance in high-brightness applications. This technology has an ultra fast reaction time allowing refresh rates up to 240Hz.

By design, DLP is best suited for high-brightness applications thanks to its ability to cope 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 like LCD. In addition, the DLP panel can be more efficiently cooled through liquid cooling which further improves stability and lifetime. As a consequence, DLP is also better suited in combination with laser phosphor illumination.

In addition to the durability against heat, color uniformity doesn’t 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 doesn’t influence the neighboring pixel.

Why we chose for 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 of components, Barco is able to meet the color performance of Xenon, while providing the following 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)

Barco’s laser phosphor projectors deliver these benefits with the rich color reproduction of Xenon lamps 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.