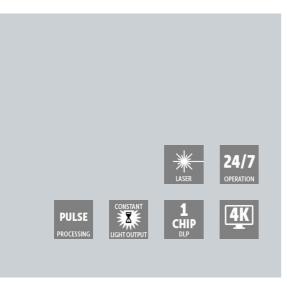
F400-N4K

Reliable native 4K up to 240Hz projector





- Dynamic resolution up to 6K and frame rate up to 240Hz for incredible image performance
- Revolutionary static laser-phosphor for speckle-free, outstanding image quality
- Rock-solid and true solid-state, fully rated for shock and vibration
- Next Gen Barco Pulse for more powerful processing and unified interface across all Barco projectors
- 5 years warranty as standard
- Also available: FS400-N4K with dedicated IR

For more information on availability, please contact your Barco sales representative. Contact us

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The F400-N4K is a true solid-state static laser-phosphor projector designed for the simulation and training market. A native 4K resolution up to 240Hz processing speed projector, the F400-N4K combines extreme detail and very high speed, suitable for any simulation environment. The F400-N4K was designed specifically for the demands of the training and simulation customer, and breathes the needed sense of realism into every simulation system.

High resolution and extreme speed

The F400-N4K is Barco's first single-chip DLP native 4K $(4,096 \times 2,176)$ projector. Using built-in or external pixel-shift, the dynamic resolution can be raised beyond 4K, up to 6K. In this way, you can project larger screens without losing any detail, further expanding the freedom of the simulation system designers.

With its processing speeds of up to 240 Hz at 4K resolution, the F400-N4K brings all details to life in even the fastest moving scenarios. This extreme performance never comes at a cost of the image quality, which follows the high-speed scenario perfectly, with very low latency. This makes the projector a brilliant match for even the most demanding applications, including fast jet or racing simulators.



F400-N4K Barco



Designed to perform - in all circumstances

The F400-N4K also benefits from the next generation proprietary Barco Pulse electronics, the powerful and flexible software architecture that ensures advanced low-latency processing operations, like pixel-shifting, warping, and blending, to take place in one single step. This is a huge advantage in the real-time processing environment of most simulator systems today. What's more, our Barco Pulse API enables partners to integrate custom management tools and value-added features to complement the projector's software.

Motion platforms, with their rapid sudden movements, are challenging environments for projectors. The F400-N4K is a true solid-state product, which means no moving parts like color or phosphor wheels and is fully rated for shock and vibration. With the electronics, hardware and software built around a unique H-beam shaped aluminum core, the F400-N4K has an optimized strength-to-weight ratio providing a sturdy platform as well as easy access if servicing is required. Optional accessories to support the lens on motion-based simulators are also available, contributing to even higher image robustness.

| Product specifications | F400-N4K |
|------------------------------------|--|
| General specifications | |
| Brightness | 5,000 typical ANSI lumens |
| | 5,300 typical center lumens |
| Contrast ratio | 2,000 – 10,000:1 sequential |
| IR for NVG | no |
| Brightness uniformity | 90% |
| Aspect ratio | 1.88:1 |
| Projector type | 4K 1-chip DLP LaPh RGB projector |
| Resolution | 4,096 x 2,176 (4K native) 6,144 x 3,264 (6K) |
| Lens type | FLD+ / FLDX / FLC |
| Optical lens shift | Vertical up to 134% depending on iris Horizontal up to 50% depending on lens Motorized zoom & Focus + Lens memory (FLDX) Motorized lens shift (all lenses) |
| Color correction | P7 RealColor™ |
| Color space | REC709 |
| CLO (constant light output) | Yes |
| Light source | RGB LaPh (static laser phosphor) |
| Light source lifetime | Minimum 25,000 hours @ full power Up to 50,000 hours, depending on mode of operation |
| Sealed DLP™ core | Yes |
| Orientation | 360° rotation, no restrictions |
| 3D | Active stereoscopic 3D |
| Image processing | Embedded warp θ blend engine |
| Keystone correction | Yes |
| Inputs | 1 x DP 1.4 (HDCP 2.2) 1 x HDMI™ 2.1 (HDCP 2.2) 4 x DP 1.2 |
| Input resolutions | Including and up to: 4,096 x 2,176 @ 60Hz 4,096 x 2,176 @ 120Hz 4,096 x 2,176 @ 240Hz* 6,144 x 3,264 @ 60Hz |
| Input color depth | Up to 12-bit, depending on configuration |
| Software tools | Pulse Toolset + Android app + iOS app + IMS |
| Control | IR, RJ45, Cabled Remote Control |
| Network connection | 10/100/1000 Mbit |
| Power requirements | 100-240V / 50-60Hz |
| Power consumption | 815W typical 1200W maximum rated |
| BTU per hour | 2781 BTU/h typical 4095 BTU/h maximum |
| Noise level (typical at 25°C/77°F) | 34 db(A) |
| Operating temperature | 10 -40 °C (sea level) |
| Standby power | < 0.5W |
| Storage temperature | -20 to 60 °C |
| 24/7 operation | Yes |
| Operating humidity | 20 -80% RH |
| Storage humidity | 10 -90% RH |
| Dimensions (WxLxH) | 472 x 562(542) x 293 mm / 18,6 x 22,1(21,3) x 11,5 in (front cover removed) |
| Weight | 31,0 kg / 68 lbs |
| Standard accessories | Power cord, wireless remote control |
| Certifications | CE, FCC Class A and cSGSus, KCC, CCC |
| Warranty | Limited 5 years parts and labor, extendable. |
| * | * Future software release |

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