F400-N4K

Native 4K up to 240Hz projector for simulation

LASER

24/7 OPERATION

PULSE PROCESSING

CONSTANT LIGHT OUTPUT

1 CHIP DLP

4K
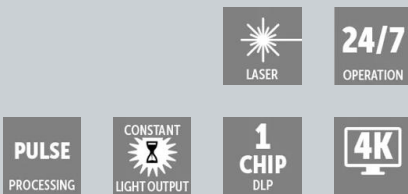
- **Native 4K resolution @60-240Hz framerate for incredible image performance**

- **Dynamic resolution up to 6K with built-in or external pixel-shift**

- **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**

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

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

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 x 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.

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 specificaties	F400-N4K
General specifications	
Opmerkingen	PRELIMINARY
Helderheid	5,300 Center Lumens 5,000 ANSI Lumens
Contrastverhouding	2,000 – 10,000:1 sequential
Infrarood voor nachtkijkers	no
Helderheidsuniformiteit	90%
Beeldverhouding	1.88:1
Type projector	4K 1-chip DLP LaPh RGB projector
Resolutie	4,096 x 2,176 (4K native) 6,144 x 3,264 (6K)
Type lens	FLC, and FLDX with separate F400 lens holder adapter
Optische lensverschuiving	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)
Kleurcorrectie	P7 RealColor^{TM}
Kleurruimte	REC709
CLU (constante lichtuitvoer)	Yes
Lichtbron	RGB LaPh (static laser phosphor)
Levensduur lichtbron	25,000 hours @ Full Power Up to 50,000 hours
Verzegelde DLP™-kern	Yes
Oriëntatie	360° rotation, no restrictions
3D	Active stereoscopic 3D
Beeldverwerking	Embedded warp & blend engine
Trapeziumcorrectie	Yes
Ingangen	1 x DP 1.4 (HDCP 2.2) 1 x HDMI 2.1 (HDCP 2.2) 4 x DP 1.2
Invoerresoluties	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
Kleurdiepte invoeren	Up to 12Bits depending on set-up
Softwaretools	Prospector, PToolSet
Controle	IR, RJ45, Cabled Remote Control
Netwerkverbinding	10/100 base-T, RJ45 connection
Voedingsvereisten	100-240V / 50-60Hz
Energieverbruik	1103W, 705W nominal
BTU/uur	2404 BTU/h Typical 3763 BTU/h Maximum
Geluidsniveau (standaard bij 25°C/77°F)	34 db(A)
Bedrijfstemperatuur	10 -40 °C (sea level)
Opslagtemperatuur	-20 to 60 °C
24/7 operation	Yes
Vochtigheid in bedrijf	20 -80% RH
Vochtigheid bij opslag	10 -90% RH
Afmetingen (B x L x H)	472 x 562(542) x 286 mm / 18,6 x 22,1(21,3) x 11,3 in (front cover removed)
Gewicht	31,0 kg / 68 lbs
Standaardaccessoires	Power cord, wireless remote control
Certificeringen	CE, FCC Class A and cNus
Garantie	Limited 5 years parts and labor, extendable.
*	* Typical ANSI lumens ** Mode dependant

Laatst bijgewerkt: 01 Mar 2024

ENABLING BRIGHT OUTCOMES

BARCO