

# DP4K-23B

Ultra-bright 4K DLP Barco Alchemy Cinema projector for screens up to 23m (75ft)



The Barco DP4K-23B is an ultra-bright 4K cinema projector for screens up to 23m (75ft). Featuring TI's 1.38" DLP Cinema® chip, the DP4K-23B offers stunning 4K images with ultimate brightness and vibrant colors to ensure a razor-sharp movie experience on premium cinema screens. By merging the projector and media server functionalities into one projector module, the DP4K-23B Barco Alchemy projector is a full-fledged, **DCI-compliant projector and media-server solution** with **on-board storage**. Reducing the required hardware, it increases **simplicity and reliability**. The smart projector even detects potential operational errors and warns users in case of mishaps. Great in **TMS environments**, it operates **stand-alone in single-screen applications**. Thanks to the embedded **Barco Web Commander** user interface, shows can be created and scheduled remotely.

## Future-proof technology for an enthralling movie experience

A single DP4K-23B Barco Alchemy projector can truly elevate the movie experience by enabling 4K 2D to be shown at 60 fps and 4K 3D images. It also shows uncompressed 4K 60 fps alternative content for crisp images.

## Low cost of ownership

Geared with integrated Barco Alchemy technology that drives operational and maintenance costs down, the DP4K-23B offers superior image processing, pristine images and ultimate reliability at a low TCO.

The DP4K-23B projector is also available in a package with a third-party media server and it can be ordered without the Barco Alchemy module as well.

## Unique benefits of Barco Alchemy technology

- Combines media server functionalities with cinema processing electronics
- A single DP4K-23B projector shows 4K movies at 60 fps and 4K 3D content
- Fewer boxes lead to more reliability and ease-of-use
- Simple operation thanks to intuitive 'Barco Web Commander' user interface
- Easy upgrading of Series 2 projectors with Barco Alchemy module

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**Product specifications****DP4K-23B**

<b>Digital MicroMirror Device™</b>	3 x 1.38" DC4K dark metal devices
<b>Native resolution</b>	4,096 x 2,160 pixels
<b>Housing</b>	Hermetically sealed DMDs and optical assembly
<b>Lamp</b>	1.2kW - 4kW (Xenon lamp)
<b>Light output</b>	24,500 lumens (4 kW lamp)
<b>Screen size</b>	Up to 23m / 75 ft wide
<b>Contrast ratio</b>	2,000:1
<b>Prime lenses</b>	1.13 - 1.66 1.27 - 1.86 1.45 - 2.13 1.63 - 2.53 1.95 - 3.26 2.53 - 4.98 equivalent throw ratios for 4K 1.38" DMD
<b>Control I/O</b>	3x Ethernet (RJ 45)3D interface USB RS-232 interface
<b>Integrated Cinema Media Processor</b>	DCI 4K 2D up to 60fps* DCI 4K 3D (24 or 30 fps per eye)* DCI High Frame Rates 2K 3D up to 120fps (60fps per eye) JPEG 2000 bit-rates up to 625Mbps Dual-channel color-correction MPEG-2 (4:2:0 and 4:2:2 up to 60fps) 2x DisplayPort 1.1a (up to 4K 2D 60fps and 4K 3D 30fps)** 2x 3G-SDI inputs 1x HDMI 1.4a (up to 4K 2D 24fps, support for BluRay 3D) 16x AES/EBU audio channels (2x RJ45) 8x GPI, 8x GPO (4x RJ45) 2x ETH for content connectivity & ingest 2x front-accessible USB 3.0 for fast ingest 2x front-accessible USB 2.0 Video watermarking: Civolution NexGuard Audio watermarking: Civolution Closed captioning devices: Support for SMPTE 430-10 * 4K 24fps is standard. For 4K 60p / 4K 3D on ICMP upgrade modules a license is required. Newly-built 4K Barco Alchemy projectors have the license standard included. ** On B&C series projectors, the DisplayPort inputs replace the DVI inputs of the Cinema Controller.
<b>Integrated storage</b>	1.9TB effective storage (RAID-5) 3x 1TB Hot-swappable 2.5" hard-drives
<b>Barco Web Commander</b>	Projector Dashboard Projector Control Board Show Player/Editor/Scheduler Automation, 3D, Ingest Dynamic DCP playlists & intermission TMS integration Smart Projector Status Via HTML5 web-browsers including iOS & Android tablets Dual projector passive 3D Auro 11.1 decoding
<b>Power requirements</b>	200-240V 30A 50-60Hz 19,000 BTU/hr (with 4kW lamp)
<b>Dimensions</b>	604(H) x 754(W) x 1129(D) mm / 23.78(H) x 29.69(W) x 44.45(D) inch NB.: min. 5 cm of air inlet spacing required at the bottom of projector
<b>Weight</b>	134 kg (295 lbs)
<b>Ambient temperature</b>	35°C / 95°F Max.
<b>Exhaust airflow</b>	350 CFM
<b>Standard Features</b>	CLO (Constant Light Output) Powerful SNMP agent Motorized/memorized lens (focus, zoom & shift) Advanced patented DMD cooling

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### Options

Barco CineMate App (iOS & Android) - free  
3D add-ons  
Touch screen monitor, inc. Barco Commander & Communicator  
Pedestal  
CineCare Web  
Auro 11.1 license  
Dual projection license  
4K 60p/ 4K 3D license (included)  
Live 3D\*\*\*  
Ghostbusting\*\*\*  
\*\*\* Software roadmap