

DP4K-23B

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



The Barco DP4K-23B is a 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 superb 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

BARCO

Visibly yours

Product specifications**DP4K-23B**

Digital MicroMirror Device™	3 x 1.38" DC4K dark metal devices
Native resolution	4,096 x 2,160 pixels
Housing	Hermetically sealed DMDs and optical assembly
Lamp	1.2kW - 4kW (Xenon lamp)
Light output	24,500 lumens (4 kW lamp)
Screen size	Up to 23m / 75 ft wide
Contrast ratio	1,850:1
Prime lenses	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
Control I/O	3x Ethernet (RJ 45) 3D interface USB RS-232 interface
Integrated Cinema Media Processor	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 HDMI 2.0a (up to 4K 2D 60fps) 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 Gbe 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 60 fps / 4K 3D on ICMP upgrade modules a license is required. Newly-built 4K BarcoAlchemy projectors have the license standard included.
Integrated storage	1.9TB effective storage (RAID-5) / 3x 1TB Hot-swappable 2.5" hard-drives 3.9TB effective storage (RAID-5) / 3x 2TB Hot-swappable 2.5" hard-drives
Barco Web Commander	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 3D: passive and active Auro 11.1 decoding
Power requirements	200-240V 30A 50-60Hz 19,000 BTU/hr (with 4kW lamp)
Dimensions	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
Weight	134 kg (295 lbs)
Ambient temperature	35°C / 95°F Max.
Exhaust airflow	350 - 390 cfm (10 - 11 m³/min)
Standard Features	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
Barco Escape license
Dual projection license
4K 60p/ 4K 3D license (included)
Live 3D***
Ghostbusting***
*** Software roadmap