

DP4K-23B

Bright 4K DLP Barco Alchemy Cinema projector (24,500 lumens)



- 4K resolution
- Integrated, DCI-compliant projector
- Combines media server functionalities with Series 3 cinema processing electronics

The Barco DP4K-23B is a bright 4K cinema projector designed for bigger screens. 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.

Low cost of ownership

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

Easy maintenance and operation

The DP4K-23B comes with the intuitive 'Barco Web Commander' user interface for easy operation. It detects potential operational errors and warns users if, for instance, a scheduled show is missing assets or KDMs. It also has a modular architecture for simple serviceability and higher uptime.

Unique benefits of Barco Alchemy technology

Combines media server functionalities with cinema processing electronics A single



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

- 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
- Enhanced 4K resolution at high frame rates and ultimate brightness for a premium movie experience
- Barco's 4K digital cinema projectors are the first to show 4K movies at 60 fps and 4K 3D content on a single projector
- Highest bit rates ensure pristine content at all times, also at high frame rates
- Lowest cost of ownership thanks to integrated Barco Alchemy technology, lowest lamp operating cost, re-usable filters, low maintenance, etc.
- Maximum ease-of-use through intuitive 'Barco Web Commander' screen management system, running via a web browser
- Barco Web Commander also runs on iOS and Android tablets via the free 'Barco CineMate' app
- Barco Communicator for simple configuration and updates of all modules in the projector
- Long-term image quality and brightness thanks to Barco proprietary sealed engine and advanced DMD cooling
- Coolest 4K engine for enhanced lifetime thanks to Barco's patented, advanced DMD cooling
- Easy installation and maintenance thanks to proven modular design and common platform with DP2K series

Product specifications

DP4K-23B

General specifications

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
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 Displayport 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
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, 50-60Hz, 30A 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 m ³ /min)
Standard Features	CLO (Constant Light Output) Powerful SNMP agent Motorized/memorized lens (focus, zoom & shift) Advanced patented DMD cooling
Safety requirements	Class 1 risk group 3
Options	3D add-ons Touch screen monitor, inc. Barco Commander & Communicator Pedestal CineCare Web Auro 11.1 license Barco Escape license Live 3D*** *** Software roadmap

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