

DP2K-23B

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



- **Bright images, low operating cost**
- **Integrated, DCI-compliant projector**
- **Combines media server functionalities with Series 3 cinema processing electronics**

The Barco Alchemy DP2K-23B is a bright and fully integrated digital cinema projector for theaters with bigger screens that provides exceptional image quality for a premium movie experience in 2D and 3D. By merging the projector and media server functionalities into one projector module, the DP2K-23B Barco Alchemy projector is a full-fledged, DCI-compliant projector and media-server solution with on-board storage. Reducing the required hardware 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

Geared with the integrated Barco Alchemy technology that drives operational and maintenance costs down, the DP2K-23B offers superior image processing, DCI quality images and ultimate reliability at a low TCO.

Easy maintenance and operation

The DP2K-23B comes with the intuitive 'Barco Web Commander' user interface for easy operation. The projector 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

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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- 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
- Lowest cost of ownership thanks to integrated Barco Alchemy technology, re-usable filters, low maintenance, etc.
- Includes storage
- Maximum ease-of-use through intuitive 'Barco Web Commander' screen management system, running via a web browser
- Barco Communicator for simple configuration and updates of all modules in the projector
- Long-term image quality and brightness thanks to proprietary sealed engine and advanced DMD cooling
- Easy installation and maintenance thanks to proven modular design and common platform with DP2K C-series

PRODUCT SPECIFICATIONS**DP2K-23B**

Digital MicroMirror Device™	3 x 1.2" DC2K dark metal devices
Native resolution	2048 x 1080 pixels
Housing	Hermetically sealed DMDs and optical assembly
Lamp	1.2kW -4kW (Xenon lamp)
Light output	24,500 lumens
Screen size	Up to 23 m / 75ft wide
Contrast ratio	2,000:1
Control I/O	3x Ethernet 8x GPIO (DB 25) 3D interface USB RS-232 interface (DB9)
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 HDMI2.0a (up to 4K 2D 60fps) 3G-SDI inputs 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
Barco Communicator	Projector installation & configuration Projector update & maintenance
Projector diagnostics	via Integrated Media Server via Communicator control software via SNMP agent
Power requirements	200-240V, 50-60Hz, 30A
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	133 kg (293 lbs)
Ambient temperature	35°C / 95°F Max.
Exhaust airflow	350 – 390 cfm (10 – 11 m ³ /min)
Safety requirements	Class 1 risk group 3
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 Live 3D*** *** Software roadmap

Last updated: 29 Mar 2021

Technical specifications are subject to change without prior notice. Please check www.barco.com for the latest information.