

DP2K-23B

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



The Barco Alchemy DP2K-23B is a bright and fully integrated digital cinema projector for theaters with screens up to 23m (75ft) wide, based on Texas Instruments' 1.2" DLP Cinema® chip, ensuring 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, 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

Geared with the integrated Barco Alchemy technology that drives operational and maintenance costs down, the DP2K-23B offers superior image processing, pristine 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.

The DP2K-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
- 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**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
Prime lenses	1.25 - 1.45 1.4 - 2.05 1.6 - 2.35 1.8 - 2.8 2.15 - 3.6 2.8 - 5.5
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) 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 Barco Alchemy 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
Barco Communicator	Projector installation & configuration Projector update & maintenance
Projector diagnostics	via Integrated Media Server via Communicator control software via SNMP agent
Power requirements	220V
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)

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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-projector license
Live 3D***
Ghostbusting***
*** Software roadmap