

Freya

Barco Residential's Freya projector is based on Barco's highly acclaimed Series 4 platform.



- Cinema at Home Series
- Native 4K Resolution (4,096 x 2,160)
- RGB Laser
- 100% REC.2020
- Up to 7,500 ANSI Lumens
- Architectural Edition Available

Freya is the wife of Odin, the most powerful god in Northern mythology and the mother of Balder. That alone should be enough to understand the power of this projector. The core of the projector uses our renowned Pulse platform which is then combined with Alchemy, creating a very smart, easy to use projector. Freya is exclusively created for high-end home theaters, with more contrast and a wider color gamut, at the level of our reference Thor projector. It features the latest in native 4K DLP® chipsets from Texas Instruments and the acclaimed Barco Alchemy ICMP (Integrated Cinema Media Processor).

Cinema at Home

As the opening credits roll, the audience is transported into an unexpected world of superior movie realism, embraced by ultimate image quality and immersive sound. This compelling universe is created by Barco Residential's Freya projector.

High-end simplicity

Freya combines media server functionalities with cinema processing electronics: Barco Alchemy Integrated Cinema Media Processor (ICMP).

The Alchemy includes two HDMI 2.0 / HDCP 2.2 inputs for UHD Blu-Ray, games consoles and other consumer devices, supporting HDR10 video signals.

Offering advanced processing power combined with media server functionality, integrated playback and content management, Barco Alchemy supports 4K 2D content at up to 60fps and 4K 3D at 30fps. By simplifying the hardware requirements installation is simpler and the system made more reliable and



easier to use.

4K at the highest level

Freya inherits much from our award winning Pulse platform, combining this with the Alchemy ICMP we have created a smart and powerful projector. A dedicated 4K (4 x 3Gb/s) input board enables playback of native 4K content, whilst Barco's renowned DCI-compliant image quality, coupled with outstanding uniformity unique RGB laser illumination.

In addition, Freya smartly manages its power consumption of only 5.4 lm/W and in eco-mode, it consumes less than 3 Watt. Freya can also be remotely woken up on LAN for scheduled maintenance or content ingest.

RGB laser projectors offer improved image quality and are fully compatible with popular 3D systems. Additionally, the projectors light output remains constant over time when used according to recommended practices. Barco Residential's Cinema at home models offer exceptional contrast, with Freya delivering 1000:1 ANSI contrast.

Product specifications

FREYA

General specifications	
Projector type	Three chip DLP
Technology	3x 0.98" DC4K TRP
Resolution	4,096 x 2,160 (4K)
Aspect ratio	1.89:1
Light source	RGB Laser
Light output	7,500 ANSI Lumens
Contrast ratio	5,500:1 Sequential 1,000:1 ANSI
Brightness uniformity	80% at Sides 75% at Corners
Lens range	Type B Lenses: (R98013983) -Zoom Lens 1.38" VHC HDR 4K: 1.58 – 2.41:1 * (R98013333) -Zoom Lens 1.38" VHC HDR 4K: 1.89 – 2.58:1 * (R98013343) -Zoom Lens 1.38" VHC HDR 4K: 2.03 – 2.94:1 * (R98013533) -Zoom Lens 1.38" VHC HDR 4K: 2.31 – 3.78:1 * (R98013543) -Zoom Lens 1.38" VHC HDR 4K: 2.77 – 4.76:1 * Type C Lenses: (R98620053) -TLD+ VHC ULTRA LENS: 1.09 -1.40:1 (R98620103) -TLD+ VHC ULTRA LENS: 1.28 -1.74:1 * Standard Lens Option(s)
Optical lens shift	Type B Lenses: 55% Up or Down 30% Left or Right Type C Lenses: 21% Up or 50% Down 10% Left or Right
Tilt	Freya: 150° Forwards 150° Backwards Freya Architectural: 900° Forwards 900° Backwards
Color correction	P7
Color gamut	DCI P3/100% Rec.2020; when measured in xy-color coordinates)
Image processing	Alchemy - Integrated Cinema Media Processor (ICMP)
WARP	N/A
Orientation	Pedestal / Table Top
Network connection	10/100 Ethernet via RJ45 connection
HDR	HDR10
3D	Active glasses systems and polarization systems on silver screens are supported. Color separation systems are not supported.
Inputs	Barco Alchemy ICMP included in the projector: 2 x HDMI2.0a (up to 4K 2D 60fps) 2 x 3G-SDI inputs 16 x AES/EBU audio channels (2 x RJ45) 8 x GPI, 8 x GPO (4 x RJ45) 2 x Gbe for content connectivity & ingest 2 x front-accessible USB 3.0 for fast ingest 2 x front-accessible USB 2.0 DCI 4K 2D up to 60fps* DCI 4K 3D (24 or 30fps per eye)* DCI High Frame Rates 2K 3D up to 120fps (60fps per eye) JPEG 2000 bit-rates up to 625 Mbps MPEG-2 (4:2:0 and 4:2:2 up to 60fps)
DCI	DCI Compliant
Integrated storage	3.9TB effective storage (RAID-5) via 3 x 2TB Hot-swappable 2.5" hard-drives
Control	RS232, TCP/IP, 8 x GPIO
Power requirements	Single Phase: 200 -240V, L1 + N + PE, 9A, 50 -60Hz (Y) Triple Phase: 200 -240 / 346 -415V, 3W + N + PE, 8A, 50/60Hz Triple Phase: 200 -240, 3W + PE, 8A, 50/60Hz
Power consumption	1.4kW (3W in Eco Mode)
Noise level (typical at 25°C/77°F)	48 dB(A) -Min (ambient temperature below 20°C) 50 dB(A) -Normal 60 dB(A) -Max (ambient temperature over 35°C)
Operating temperature	10 -40°C (104F) Max. (at Sea Level)
Operating humidity	20 -80% Relative Humidity
BTU per hour	4,600 BTU/h
Airflow requirements	Air Inlet (from Rear w/Feet Down): Front / Rear / Bottom (at user input side) Exhaust (from Rear w/Feet Down): Top
Exhaust airflow	300 CFM

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Dimensions (WxLxH)	Freya: (excl. Lens) C Type Lens Holder: 710 x 1,070 x 547 mm 27.95 x 42.13 x 21.54 inches B Type Lens Holder: 710 x 1,132 x 547 mm 27.95 x 44.55 x 21.54 inches Freya Architectural: (excl. Lens) C Type Lens Holder: 976 x 1,070 x 702 mm 38.43 x 42.13 x 27.64 inches B Type Lens Holder: 976 x 1,132 x 702 mm 38.43 x 44.55 x 27.64 inches
Weight	Freya: (excl. Lens) 90kg / 198.5lbs Freya Architectural: (excl. Lens) 125kg / 275.5 lbs
Warranty	Limited 3 years parts and labor Extendable up to 5 years
Safety requirements	This projector becomes RG2 when specified interchangeable lens with throw ratio less than or equal to 2.1 is installed. For US Market: This projector becomes RG2 when specified interchangeable lens with throw ratio less than or equal to 1.8 is installed. For more information please refer to the user manual.

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