# Thor Cinema at home Series





The Barco Thor platform represents the pinnacle of Barco Residential's projection portfolio. Thor, the hammerwielding god of lightning, brings true, direct laser projection to the most exclusive homes for the first time. The perfectly designed 15,000-lumen output, hermetically sealed 4K DLP® engine delivers reality altering levels of immersion for the largest home cinemas.



## Thor



### Key features

#### World's first

Thor is the world's first and only integrated laser 6P RGB laser, 4K 3D projection solution for Cinema at Home. In order to reliably achieve long lifetime at brightness levels twice that of xenon projectors, a sophisticated control system actively cools both laser modules and the DMD engine, providing a predictable 30,000 hour lifetime with at least 80% of the initial brightness.

#### Laser speckle

Thanks to Barco's industry-leading technology to minimize laser speckle, Thor is able to provide superior 2D and 3D images on both white and silver screens.

#### Color convergence mechanism

Thor also features our unique and highly acclaimed analog color convergence mechanism. By allowing the green and red DMD chips to be manually adjusted, perfect convergence can be achieved. This attention to detail renders images sharper and more immersive than ever before.

#### **Hand built**

Not every projector can claim to be hand-built, Thor can. Even though we are using state-of-the-art technologies for most processes such as; measuring, calibrating, assembling our electronics, and manufacturing the delicate optics and mechanics, every step of the process is overseen by specifically trained professionals. Moreover, the assembly of vital parts is performed by hand. This guarantees ultimate quality at all stages of manufacture, Barco projectors do not travel down an automated production line.

## Technical specifications

| - Lu                               | W(1004 2440 2441)                                                                                                                                                                                                                                                                   |
|------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Resolution                         | 4K (4,096 x 2,160 px @ 60hz)                                                                                                                                                                                                                                                        |
| Display technology                 | DLP - 1.38" three chip DMD™                                                                                                                                                                                                                                                         |
| Housing                            | Sealed DMDs and optical assembly                                                                                                                                                                                                                                                    |
| Input compatibility                | up to 4K (4,096 x 2,160)                                                                                                                                                                                                                                                            |
| Light output                       | Up to 15,000 ANSI lumens                                                                                                                                                                                                                                                            |
| Contrast                           | 1,000 : 1 ANSI Contrast (w/WHC Lens) / 6,000 :1 On/Off contrast                                                                                                                                                                                                                     |
| Light engine                       | 6P RGB Laser                                                                                                                                                                                                                                                                        |
| Light source life time             | 30,000 hours or more, replaceable illumination                                                                                                                                                                                                                                      |
| Lenses                             | 1.13 - 1.72 : 1 4K-VHC LNS<br>1.35 - 1.86 : 1 4K-VHC LNS or DC4K HC<br>1.46 - 2.10 : 1 4K-VHC LNS or DC4K HC<br>1.65 - 2.60 : 1 4K-VHC LNS or DC4K HC<br>2.00 - 3.35 : 1 4K-VHC LNS or DC4K HC                                                                                      |
| Lens shift range                   | Up to 25% Vertical and 15% Horizontal                                                                                                                                                                                                                                               |
| Inputs                             | Barco Alchemy ICMP included in the projector:<br>2x HDMI2.0a (up to 4K 2D 60fps)<br>JPEG2000 2K & 4K DCI play-out<br>High Frame Rates 3D up to 120fps (60fps per eye)<br>2x 3G-SDI inputs<br>16x AES/EBU audio channels (2x RJ45)                                                   |
| 3D                                 | Color3D (Barco Laser3D): Native 6-primary color-3D system. Only requires color filter glasses (Dolby3D glasses cannot be reused) Active glasses systems Polarization recuperation systems                                                                                           |
| Control                            | TCP/IP, 8 x GPIO, RS232                                                                                                                                                                                                                                                             |
| Dimensions                         | Projector: 744 x 1,446* x 706 mm / 29.3 x 56.9 x 27.8 inches (with feet, no lens) Chiller with the following dimensions: 701 x 701 x 800 mm / 27.6 x 27.6 x 31.5 inches                                                                                                             |
| Weight                             | Projector: 200kg (~440lb), Chiller: ~115kg (~250lb)                                                                                                                                                                                                                                 |
| Power requirements                 | Projector: 200 - 240 / 346 - 415 V 50 - 60 Hz 16A 3W+N+PE (Y connection) Power cord size range: 4 sq mm to 6 sq mm, 10AWG to 8AWG Circuit breaker range: 25A to 40A  Chiller: 230 / 400V 3W+N+PE 16A 2.5 sq mm (Y connection) or 208V / 3W+PE (delta connection) Max. 16A per phase |
| Power consumption                  | Projector @ full laser power: 3.5 kW (2D or Polarization D) / 2.0 kW (Barco Laser3D - 6P)<br>Chiller @ full laser power: 2.0 kW (2D or Polarization 3D) / 1.6 kW (Barco Laser3D - 6P)                                                                                               |
| BTU per hour                       | 18,500 BT/U                                                                                                                                                                                                                                                                         |
| Noise level (typical at 25°C/77°F) | TBD                                                                                                                                                                                                                                                                                 |
| Operating temperature              | 30°C (86°F) Max. (projector and chillers)                                                                                                                                                                                                                                           |
| Operating humidity                 | 75% Max. (projector and chillers)                                                                                                                                                                                                                                                   |
| Orientation                        | Desktop front                                                                                                                                                                                                                                                                       |
| Warranty                           | Limited 3 years parts and labor.                                                                                                                                                                                                                                                    |
| Certifications                     | CE, ETL/UL/FCC.                                                                                                                                                                                                                                                                     |
|                                    | 62, 2.2, 92,166.                                                                                                                                                                                                                                                                    |

<sup>\*</sup>excludes chiller hoses

