CHRISTIE SAPPHIRE 4K40-RGBH

Large venues | Live events & performing arts | Projection mapping | Rental & staging | Theme parks & attractions | Visualization

Experience the brilliance of hybrid illumination with vibrant DCI-P3 color and stunning native 4K clarity in both 2D and 3D.

Hybrid brilliance

As the world's first high-brightness hybrid RGB pure laser and laser phosphor projector, Christie Sapphire® 4K40-RGBH is engineered for any 2D application, all active and passive 3D formats, and any screen type.

A new standard in 3D projection

Sapphire 4K40-RGBH boasts an exclusive Infitec® color comb 3D option for dark rides, other media-based attractions, and visualization powerwalls. It outshines traditional laser phosphor and lamp-based projectors, offering a brighter, richer, more immersive, and lifelike 3D experience.

Key features

- **All-screen compatible,** enabling optimal viewing for standard gain screens, silver screen 3D, and rear-screen projection surfaces in both 2D and passive and active 3D.
- **TruLife+™ "all-in" electronics** with every connection you need built-in, including quad 12G-SDI with full-size BNC's, four DisplayPort connections, three HDMI connections, and more.
- **Compatible with all Christie 4K 3DLP ILS4 lenses.**
- **Optional Infitec color comb 3D solution, as well as polarization and active 3D capabilities.** Sapphire delivers better light efficiency and a broader color gamut — perceived as DCI-P3.



CHRISTIE®

Technical specifications		Christie Sapphire 4K40-RGBH
Image	brightness[1,2,3,4]	• 40,950 ISO lumens • 36,400 ANSI lumens
	contrast	• 2000:1 On/Off • 4500:1 On/Off[3] with ultra high contrast lens
Display technology	type	• Dust-sealed 3DLP (1.38")
	resolution	• 4096 x 2160 native 4K resolution
Illumination	type	• Unique hybrid illumination: Solid-state RGB (red, green & blue) pure laser combined with dual laser phosphor system
	performance	• RGB laser light source: 25,000 hours to 50% brightness when operated at 100% brightness[5] • Laser phosphor light source: 20,000 hours to 50% brightness when operated at 100% brightness
	color performance	• Nominally DCI-P3. DCI-P3+ capable
	field replaceable	• Yes
Orientation		• Omnidirectional
Image processing		• Christie TruLife+™ electronics, 1.2 Gpx/s
Frame rates	standard	• 24-60 Hz 4K (4096 x 2160) and/or 4K UHD (3840 x 2160)
	optional - high frame rates and active 3D	• Christie® Mirage option: 2D up to 120 Hz 4K and 4K 3D up to 120 Hz (48-60 Hz per eye) with third-party active glasses and standard screens • Mirage Pro option: All features of Mirage, plus 2K at 240-480 Hz or 2K 3D at 120-240 Hz per eye (scales to fill the chip), and Christie View simultaneous multi-content viewer at 240 Hz at 2K via four feeds of 24-60 Hz
Passive 3D	optional - color comb 3D	• All-new color comb 3D solution: with IFH (Intelligent Filter Holder), Sapphire 3D filters and Infitec 3D glasses to enable dual-projector passive 3D on any projection surface (Mirage and Mirage Pro upgrade optional)
	optional - polarized 3D	• Single-projector 3D: With Mirage or Mirage Pro and third-party active-to-passive filter and glasses (circular or linear) (requires a screen that preserves polarized light) • Dual-projector 3D: With third-party external passive polarization filters (circular or linear) and a screen that preserves polarized light (Mirage and Mirage Pro upgrade optional)
Inputs	standard	• 1 x HDMI 2.1 • 2 x HDMI 2.0 • 2 x DisplayPort 1.4 • 2 x DisplayPort 1.2 • 4 x 12G-SDI (full-size BNC) • SDVoE (Christie Terra®) • Christie Link 1 input/1 output (2x Fiber/QSFP+)
Warping and blending	standard	• Christie Twist™ • Christie Mystique™ Lite (complimentary software download)
	optional	• Twist Premium and Twist Pro • Mystique - Essentials, Pro Venue, Premium & Large Scale Experience Editions
Multi-projector management	optional	• Christie Conductor monitors/controls up to 256 projectors on a single network (complimentary software download)
Lenses	high brightness	• 0.38:1 UST high brightness (ILS4)[2] • 0.72:1 high brightness (ILS4) • 0.9:1 high brightness (ILS4) • 1.13-1.66:1 high brightness (ILS4) • 1.45-2.17:1 high brightness (ILS4) • 1.95-3.26:1 high brightness (ILS4) • 2.71-3.89:1 high brightness (ILS4) • 3.89-5.43:1 high brightness (ILS4) • 4.98-7.69:1 high brightness (ILS4)[6]
	ultra high contrast[3]	• 0.72:1 ultra high contrast (ILS4) • 0.9:1 ultra high contrast (ILS4) • 1.13-1.66:1 ultra high contrast (ILS4) • 1.45-2.17:1 ultra high contrast (ILS4) • 1.95-3.26:1 ultra high contrast (ILS4) • 2.71-3.89:1 ultra high contrast (ILS4) • 3.89-5.43:1 ultra high contrast (ILS4)
Power	line voltage	• 200-240 VAC, 20 A, 50/60 Hz single phase • 100-120 VAC, 15 A, 50/60 Hz single phase (30% brightness maximum) • Connector: IEC60309 30 A • Optional hard-wired cable connection kit is available (to be installed by a qualified electrician)
	power consumption	• 2,900W typical (9,895 BTU/hr) • 4,000W max (13,650 BTU/hr)
Cooling		• Liquid, self-contained
Laser class		• Class 1, Risk Group 3 • Meets Class 1, Risk Group 2 with the following lenses installed: 0.38:1, 0.72:1, 0.9:1
Operating environment		• 5-40 C (41-104 F) • Relative humidity: 10-80% non-condensing
Dimensions (without lens)	size	• (LxWxH): 36.3 x 25 x 15" (922 x 635 x 380 mm)
	weight	• 202.8 lbs (92 kg)

[1] Brightness level is +/- 10%. D65 white measured at 23 C (73.4 F)
[2] Brightness is reduced up to 30% with the use of the UST lens. Focus drift will occur with this lens when switching between prolonged periods of light and dark content
[3] Brightness is reduced up to 30% with the use of an ultra high contrast lens
[4] In ambient temperatures up to 30 C
[5] Based on 9-point average (results may vary depending on environmental conditions i.e., ambient temperature, humidity, dust, smog, or other contaminants.)
[6] Requires lens hood extension for Class 1, Risk Group 3. Lens hood not required if optional Infitec filter is installed

For the most current specification information, please visit christiedigital.com

Copyright 2025 Christie Digital Systems USA, Inc. All rights reserved. Our centers of excellence for manufacturing in Kitchener, Ontario, Canada and in Shenzhen, China are ISO 9001:2015 Quality Management System-certified. All brand names and product names are trademarks, registered trademarks or tradenames of their respective holders. “Christie” is a trademark of Christie Digital Systems USA, Inc., registered in the United States of America and certain other countries. DLP® and the DLP logo are registered trademarks of Texas Instruments. Performance specifications are typical. Due to constant research, specifications are subject to change without notice.
CD24136-Sapphire-4K40-datasheet-update-Aug-25-EN