

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	<ul style="list-style-type: none"> • 40,000 ISO lumens • 36,400 ANSI lumens^{1,2,3,4}
	contrast	<ul style="list-style-type: none"> • 2000:1 On/Off • 4500:1 On/Off² 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	<ul style="list-style-type: none"> • RGB laser light source: 25,000 hours to 50% brightness when operated at 100% brightness⁵ • 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, 1.2Gpx/s
Frame rates	standard	• 24-60 Hz 4K (4096x2160) and/or 4K UHD (3840x2160)
	optional - high frame rates and active 3D	<ul style="list-style-type: none"> • 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 • Christie 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 240Hz 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • Christie Twist™ • Christie Mystique™ Lite can be downloaded at no extra cost
	optional	<ul style="list-style-type: none"> • 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 and can be downloaded at no extra charge
Lenses	high brightness	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 2,900W typical (9,895 BTU/hr) • 4,000W max (13,650 BTU/hr)
Cooling		• Liquid, self-contained
Laser class		<ul style="list-style-type: none"> • 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		<ul style="list-style-type: none"> • 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 380mm)
	weight	• 202.8lbs (92kg)

¹ 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

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CD5414_Sapphire-4k40-RGBH-data-sheet-Mar-25-EN

