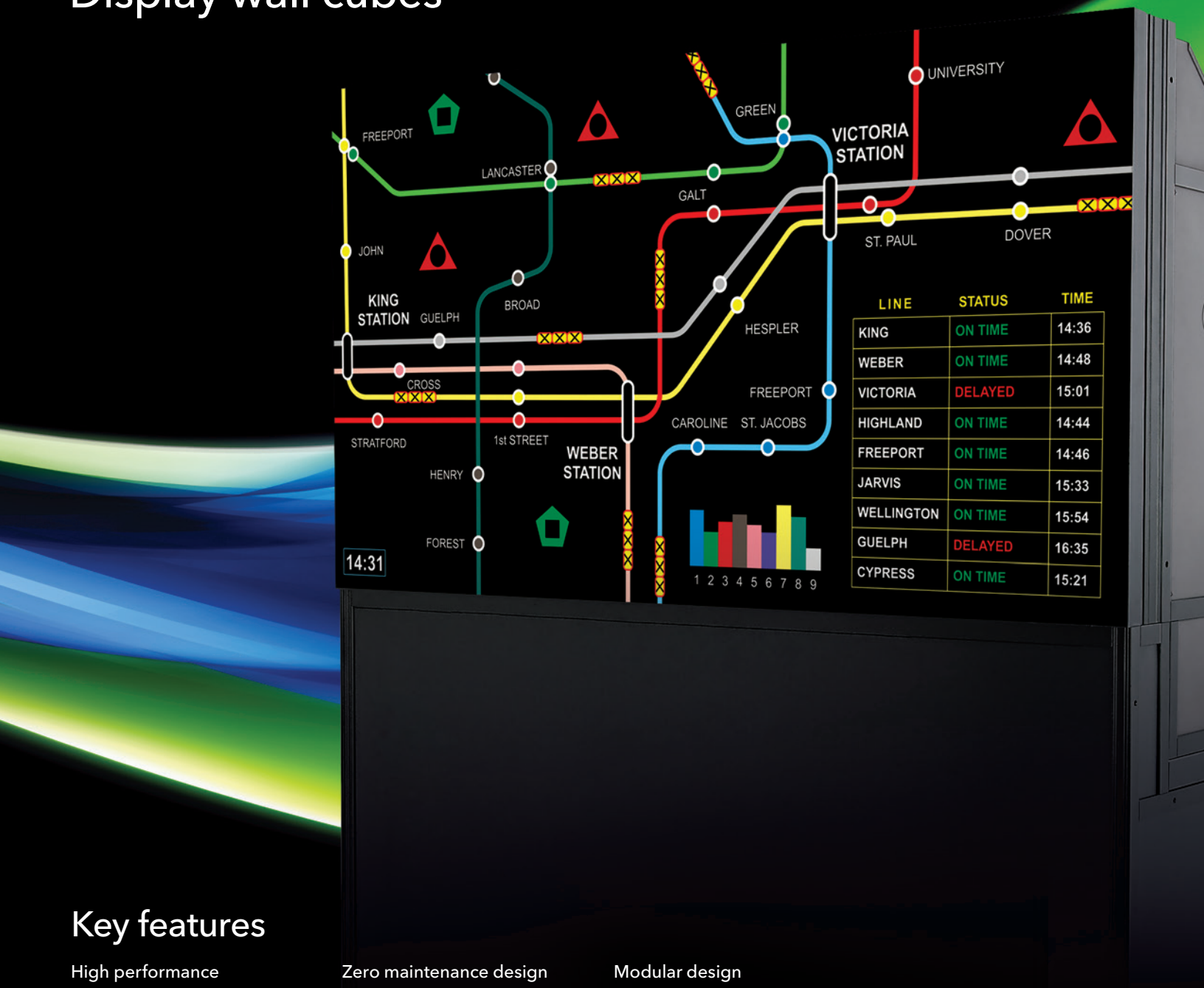
Christie Entero HB Series SXGA+, HD and WUXGA Display wall cubes

Wi-Fi

LED TECHNOLOGY



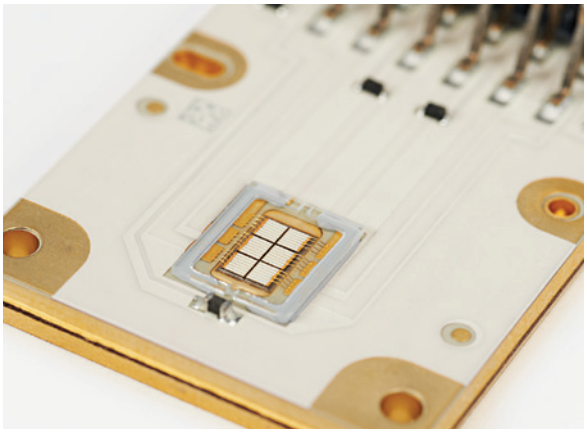
Key features

- High performance
- Low power consumption
- Wide viewability
- Automation features
- Zero maintenance design
- Upgradable
- Diagnostic monitoring
- Plug-and-play setup
- Modular design
- Superior reliability
- Wi-Fi control
- Front and rear access

CHRISTIE

Zero-maintenance design, long-life, ultimate reliability

For mission-critical control and monitoring applications, it's paramount that your video wall stays operational, even in the most demanding situations. The Christie® Entero™ HB Series features a zero-maintenance design, LED illumination and no consumables to provide more than 80,000 hours of reliable service under normal operation. The modular design, lightweight service panels and remote control screen release and lift system makes installation and service easy.



▲ Redundant LED design offers fail-safe and reliable operation.

Entero HB SXGA+

Specifications					
Models		Cube	Screen[1]	Engine	
	50" SXGA+ cube system, rear access	• CC50-2301	• SC50-XP01 Cross Prism	• RPMSP-LED02	
	50" SXGA+ cube system, front access	• CF50-2801			
	67" SXGA+ cube system, rear access	• CC67-3101	• SC67-XP01 Cross Prism		
	70" SXGA+ cube system, rear access	• CC70-3201	• SC70-XP02 Cross Prism		
	70" SXGA+ cube system, front access	• CF70-3601			
	80" SXGA+ cube system, rear access	• CC80-3601	• SC80-XP01 Cross Prism		
	SXGA+ light engine (stand-alone)	• 0.69:1 and 1.2:1 lens versions available • Non Wi-Fi models also available			
Imaging technologies	imaging	• Superior 0.95" 1-chip DLP®, Dark Chip • Texas Instruments			
	native resolution	• SXGA+ (1400 x 1050) • 4:3 aspect ratio			
	illumination	• LED (Red, Green, Blue) • OSRAM • Redundant LED Architecture			
Brightness		Eco mode	Normal mode	High-brightness mode	
	light engine (ANSI)	• 740 lumens	• 950 lumens	• Up to 1350 lumens	
	control	• Manual and continuous automatic (ArraySync™) control to manage brightness uniformity across large display walls			
Optical	brightness uniformity	• >95% at typical brightness levels specified			
	contrast ratio	• Up to 2100:1 full field without using dynamic or artificial techniques			
Physical characteristics		50" cube	67" cube	70" cube	80" cube
	screen size	• 40.02 x 30.04" (1016 x 762mm)	• 53.62 x 40.22" (1361 x 1021mm)	• 55.12 x 41.38" (1400 x 1050mm)	• 63.02 x 47.28" (1600 x 1200mm)
	cube depth (total)	• 24" (610mm) for CC model • 27.8" (706mm) for CR model	• 30.9" (784mm)	• 31.8" (807mm) for CC model • 35.6" (905mm) for CF model	• 36.2" (919mm)
	weight – cube	• 100lbs (45.2kg) for CC model • 132.2lbs (60 kg) for CF model	• 151lbs (68.6kg)	• 162lbs (73.4kg) for CC model • 214lbs (97kg) for CF model	• 181lbs (82kg)
	weight – screen	• 51lbs (23kg) for CC model • 41.9lbs (19kg) for CF model	• 76lbs (34.4kg)	• 87lbs (39.5kg) for CC model • 77lbs (35kg) for CF model	• 101lbs (45.8kg)
	weight – engine	• 55lbs (25kg)			
	cube stacking limit[2]	• 5 cubes high			
	service access	• Rear light-weight panels for CC models			
Environment		Cube	Screen	Engine	
	operating temperature	• 40-90°F (5-35°C)	• 63-88°F (17-31°C)	• 32-104°F (0-40°C)	
	non-operating temperature	• -4-122°F (-20-50°C)	• -4-95°F (-20-35°C)	• -13-158°F (-25-70°C)	
	humidity	• 20-80% NC, 35-65% NC for storage	• 40-60% NC	• 20-80% NC, 35-65% NC for storage	
	altitude	• 0-3000m (0-10,000 feet)			
	seismic	• The SXGA+ cube system, up to a stack height of 5, meets the loading and stability requirements of the BOCA National Building Code under seismic forces associated with Zone 4 seismic activity Note: Tiebacks and concrete anchors are required to achieve this rating			
Power rating (projection engine)		Eco mode	Normal mode	High-brightness mode	
	power consumption	• 135W	• 190W	• 220W	
	dissipation	• 460 BTU/hr	• 648 BTU/hr	• 750 BTU/hr	
	voltage range	• 100-240 VAC (50-60Hz)			

High-brightness. Wireless control. Ultimate reliability. Discover the Christie Entero HB Series

The Christie® Entero™ HB Series of LED projection cubes leads the industry in performance, image quality and reliability for control room video wall displays. Producing up to 1,350 lumens and available in HD, WUXGA and SXGA+ resolutions, Christie Entero HB represents the brightest, highest fidelity LED projection cubes available.

Available in 50", 67", 70", 72" and 80" sizes and featuring innovative front and rear access service panels, these cubes provide quick and easy maintenance while increasing installation options. Backed by Christie's industry-leading design, service and support, specifying an Entero HB video wall solution is easy.

Entero HB Series

Specifications				
Cross prism screen	technology	• Optical: Fresnel/cross prism • DNP		
	screen gap (image to image)[3]	• 0.2-1.7mm • Adjustable • 1mm nominal recommended for rear access @25°C • 1.7mm nominal recommended for front access @25°C		
	viewability	• 180° Horizontal • 120° Vertical • ±35° Horizontal ½ gain • ±27° Vertical ½ gain		
Brightness		Eco mode	Normal mode	High-brightness mode
	light engine (ANSI)	• 700 lumens	• 900 lumens	• Up to 1350 lumens
	control	• Manual and continuous automatic (ArraySync) control to manage brightness uniformity across large display walls		
Color	temperature range	• 3200-9300°K		
	gamut	• Wider than EBU		
	white color balance	• 0.0035 Δu' Δv'		
	control	• ArraySync automatic color management with 12-bit processing to precisely and continuously manage uniformity across large display walls without user intervention • Precise tri-stimulus color sensing (x,y,z) for superior color management • Display light engine is factory calibrated using scientific-grade spectral radiometers for high precision color management • Comprehensive fine adjust controls for manual setup if desired		
Audible noise	noise power level	• <30 dBA typical at 1 meter distance from screen center		
Inputs	standard	• 1 x digital DVI-D • 165 MHz maximum pixel clock frequency • Single link		
	DVI loop-through capability	• Up to 25 displays on a single loop-through chain		
	HDCP support	• Included (operating at native resolution)		
	optional expansion	• Secondary DVI-D input with automatic fail detection and switch over • Thinklogical direct fiber input card		
	compatibility	• All Christie video wall processors and most standard sources		
Control and networking	methods	• IR full function remote keypad • External computer or control device via Ethernet and/or RS-232 and/or Wi-Fi (Wi-Fi can be disabled with no radio frequency transmission if required)		
	physical ports	• 1 x RS-232 • 2 x Ethernet RJ45		
	Ethernet bridging (daisy chain) limit	• Up to 25 Ethernet bridges, projector to projector without external switch		
Monitoring	status display	• 2 line by 16 character OLED display		
	diagnostics	• Via status display, RS-232 and Ethernet/Wi-Fi (Wi-Fi can be disabled with no radio frequency transmission if required)		
Upgradability	software/firmware	• Fast, on-site firmware upgrades via Ethernet or RS-232		
Options	accessories	• Full function IR remote keypad • Secondary DVI-D input module • Thinklogical direct fiber input card • Cube pedestals • Alternate screen types • Motorized 6-axis accessory required for front access models		
Reliability and serviceability	MTBF	• >60,000 hrs for all major modules • 76,000 hrs for power supply		
	MTTR	• <15 minutes via modular servicing		
	cooling fan lifetime	• >100,000 hrs		
	LED lifetime	• >80,000 hrs in eco mode • >60,000 hrs in normal operating mode		
Regulatory (projection engine)		• (EC) 2011/65/EU (RoHS) • 2012/19/EU (WEEE) • Regulation (EC) No. 1907/2006 (REACH) • CAN/CSA C22.2 No. 60950-1 • UL 60950-1 • IEC 60950-1 • FCC, Part 15, Subpart B, Class A • ICES/NMB003 (A) • EN55022/CISPR22 Class A • EN55024/CISPR24 • The product is designed to comply with rules and regulations required for the product to be sold in various regional markets, including: USA/Canada, EU, Australia/New Zealand, Kuwait, China, Korea, Japan, Mexico, Ukraine, Russia, India, South Africa, and Saudi Arabia		
Warranty		• Two years parts and labor limited warranty • Extended warranty available		
Additional features and benefits		• Integrated 6-axis adjustment system – no electronic image correction required • Tiling feature to display a single source across a wall array (to 25 displays) • DVI loop-through minimizes cabling • Multiple Ethernet ports minimize cabling • Safe, water-filled, maintenance free, metal sealed heat pipe cooling system ensures long LED lifetime and reliability • No liquid cooling pumps containing hazardous liquids and requiring annual maintenance/inspection nor hazardous waste disposal • Cable channeling system enables clean, professional and concealed cabling of all input, power and interconnect cables within the cubes		

Autocalibration

With the integrated 6-axis geometry alignment system, no electronic image correction is needed, providing true native imaging with no scaling or software distortion. Christie Entero HB features built-in Christie LiteLOC™ and Christie ColorLOC™ for automatic, independent brightness and color management. These displays also use Christie ArraySync™, an innovative technology with 12-bit RGB color sensing and monitoring for continuous automated color and brightness management in every cube, across the entire video wall.

The Christie advantage

With more than thirty years as a leading manufacturer of control room displays, Christie has the technical expertise coupled with the industry's broadest range of display and processing products to help design and deploy a video wall system to meet your requirements. Plus, with our industry-leading global support and service network, you can be assured that Christie is there to help, wherever and whenever. Contact us today to discover the advantage that comes from working with Christie.

Christie Entero HB HD

Specifications				
Models		Cube	Screen[1]	Engine
	70" HD cube system, rear access	• CC70-3601	• SC70-XP01 Cross Prism	• RPMHD-LED02
	70" HD cube system, front access	• CF70-4001		• RPMHD-LED02
	HD light engine (stand-alone)	• RPMHD-LED02 • 0.64:1 lens and 1.1:1 lens versions available • Non Wi-Fi models also available		
Imaging technologies	imaging	• Superior 0.95" 1-chip DLP®, Dark Chip • Texas Instruments		
	native resolution	• HD (1920 x 1080) • 16:9 aspect ratio		
	illumination	• LED (Red, Green, Blue) • OSRAM • Redundant LED Architecture		
Brightness		Eco mode	Normal mode	High-brightness mode
	light engine (ANSI)	• 700 lumens	• 900 lumens	• Up to 1350 lumens
	control	• Manual and continuous automatic (ArraySync) control to manage brightness uniformity across large display walls		
Optical	brightness uniformity	• >95% at typical brightness levels specified		
	contrast ratio	• Up to 2200:1 full field without using dynamic or artificial techniques		
Physical characteristics	screen size	• 61.1 x 34.4" (1551 x 873mm)		
	cube depth (total)	• 36" (915mm) for CC model • 39.7" (1009mm) for CF model		
	weight – cube	• 147lbs (66.4kg) for CC model • 221lbs (100kg) for CF model		
	weight – screen	• 78lbs (35.4kg) for CC model • 66lbs (30kg) for CF model		
	weight – engine	• 55lbs (25kg)		
	cube stacking limit[2]	• 5 cubes high		
	service access	• Rear lightweight panels for CC models • Remote control screen release and lift system for CF models		
Environment		Cube	Screen	Engine
	operating temperature	• 40-90°F (5-35°C)	• 63-88°F (17-31°C)	• 32-104°F (0-40°C)
	non-operating temperature	• -4-122°F (-20-50°C)	• -4-95°F (-20-35°C)	• -13-158°F (-25-70°C)
	humidity	• 20-80% NC, 35-65% NC for storage	• 40-60% NC	• 20-80% NC, 35-65% NC for storage
	altitude	• 0-3000m (0-10,000 feet)		
	seismic	• The CC70-3601 and CF70-4001 cube systems, up to a stack height of 5, meets the loading and stability requirements of the BOCA National Building Code under seismic forces associated with Zone 4 seismic activity Note: Tiebacks and concrete anchors are required to achieve this rating		
Power rating (projection engine)		Eco mode	Normal mode	High-brightness mode
	power consumption	• 155W	• 210W	• 250W
	dissipation	• 529 BTU/hr	• 717 BTU/hr	• 853 BTU/hr
	voltage range	• 100-240 VAC (50-60Hz)		

The Christie Entero HB Series features multiple lightweight snap-in service panels for easy rear access and an improved mirror alignment system for precise geometry control.

Front-access service design improves maintenance and installation flexibility for space constrained locations.

Entero HB WUXGA

Specifications				
Models		Cube	Screen[1]	Engine
	72" WUXGA cube system, rear access	• CC72-3301		• RPMWU-LED02
	72" WUXGA cube system, front access	• CF72-3701	• SC72-XP01 Cross Prism	
	WUXGA light engine (stand-alone)	• RPMWU-LED02 • 0.64:1 lens • Non Wi-Fi models also available		
Imaging technologies	imaging	• Superior 0.96" 1-chip DLP®, Dark Chip • Texas Instruments		
	native resolution	• WUXGA (1920 x 1200) • 16:10 aspect ratio		
	illumination	• LED (Red, Green, Blue) • OSRAM • Redundant LED Architecture		
Brightness		Eco mode	Normal mode	High-brightness mode
	light engine (ANSI)	• 740 lumens	• 950 lumens	• Up to 1350 lumens
	control	• Manual and continuous automatic (ArraySync) control to manage brightness uniformity across large display walls		
Optical	brightness uniformity	• >95% at typical brightness levels specified		
	contrast ratio	• Up to 2100:1 full field without using dynamic or artificial techniques		
Physical characteristics	screen size	• 61.06 x 38.16" (1551 x 969mm)		
	cube depth (total)	• 33.33" (846mm) for CC model • 36.8" (934mm) for CF model		
	weight – cube	• 159lbs (72kg) for CC model • 220lbs (100KG) for CF model		
	weight – screen	• 80lbs (36kg) for CC model • 71lbs (32kg) for CF model		
	weight – engine	• 55lbs (25kg)		
	cube stacking limit[2]	• 5 cubes high		
	service access	• Rear lightweight panels for CC models		
Environment		Cube	Screen	Engine
	operating temperature	• 40-90°F (5-35°C)	• 63-88°F (17-31°C)	• 32-104°F (0-40°C)
	non-operating temperature	• -4-122°F (-20-50°C)	• -4-95°F (-20-35°C)	• -13-158°F (-25-70°C)
	humidity	• 20-80% NC, 35-65% NC for storage	• 40-60% NC	• 20-80% NC, 35-65% NC for storage
	altitude	• 0-3000m (0-10,000 feet)		
	seismic	• The CC72-3301 and CF72-3701 cube systems, up to a stack height of 5, meets the loading and stability requirements of the BOCA National Building Code under seismic forces associated with Zone 4 seismic activity Note: Tiebacks and concrete anchors are required to achieve this rating		
Power rating (projection engine)		Eco mode	Normal mode	High-brightness mode
	power consumption	• 155W	• 210W	• 250W
	dissipation	• 529 BTU/hr	• 717 BTU/hr	• 853 BTU/hr
	voltage range	• 100-240 VAC (50-60Hz)		

[1] Other screen types available. [2] Depending on pedestal type used. [3] Depending on environment and wall configuration.

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Printed in Canada on recycled paper. 4075 Jun 15