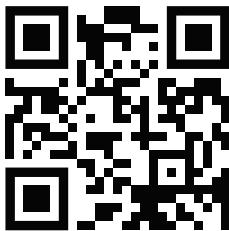# HS Series 2K Specifications

Learn about the product specifications of HS Series 2K projectors—D13HD2-HS, D13WU2-HS, D16HD-HS, D16WU-HS, D20HD-HS, and D20WU-HS. Due to continuing research, specifications are subject to change without notice.

Product documentation

For installation, setup, and user information, see the product documentation available on the Christie Digital Systems USA Inc. website at *www.christiedigital.com*. Read all instructions before using or servicing this product.

1. Access the documentation from the Christie website:

- Go to this URL: *http://bit.ly/2JtghsE* or

  https://www.christiedigital.com/en-us/business/products/projectors/1-chip-dlp/hs-series

- Scan the QR code using a QR code reader app on a smartphone or tablet.

2. On the product page, select the model and switch to the **Downloads** tab.

Related documentation

Additional information on the projector is available in the following documents.

- *HS Series 2K Installation and Setup Guide (P/N: 020-001464-XX)*
- *HS Series 2K Product Safety Guide (P/N: 020-001465-XX)*
- *HS Series 2K User Manual (P/N: 020-001466-XX)*

- *HS Series 2K Specification Guide (P/N: 020-001467-XX)*

- *HS Series 2K Service Manual (P/N: 020-001468-XX)*

- *HS Series 2K Lens Throw Ratios Technical Reference (P/N: 020-102953-XX)*

- *HS Series 2K Serial Commands Technical Reference (P/N: 020-102783-XX)*

- *Twist User Guide (P/N: 020-101380-XX)*

- *Mystique Operate Instruction Sheet (P/N: 020-102382-XX)*

Display

Learn the display features for the projector.

Description	
Panel resolution and refresh rate	
Pixel format (H x V square pixels)	1920x1080 (HD)/1920x1200 (WU)
Refresh rate	60 Hz
Contrast ratio	
Achievable contrast	250:1 ANSI, up to 1200:1 (Full Frame On/Off)
Dynamic contrast	6000:1
RealBlack contrast	2,000,000 :1
Color and Gray scale resolution	
Displayable colors	1.07 billion
Gray scale resolution	10 bits per RGB component
White point	

Nominal white
(Full white in bright mode)
	• WU models:
	  x = 0.290 +/- 0.02
	  y = 0.323 +/- 0.02
	• HD models:
	  x = 0.290 +/- 0.02
	  y = 0.333 +/- 0.02

Nominal Gamma	2.2 ±5%

Control signal compatibility

Learn the control signal compatibility features for the projector.

Description	
Ethernet port	
Interface	10Base-T/100Base-TX
Connector	Female RJ45 with latch
	Female RJ45 without latch (HDBaseT)
USB port	
Interface	WLAN USB adapter, USB 2.0
Connector	USB type-A
3D sync	
Interface	TTL inputs and outputs
Connector	BNC male
RS232 in	
Connector	9-pin subminiature D, male
Bit rate	115,200 bps
Data format	1 start bit, 8 data bits, 1 stop bit, no parity
Wired remote	
Interface	Custom/inputs and outputs
Connector	3-pin 3.5mm phone jack female

Power requirements

Learn the power requirements for HS Series 2K projectors.

D13WU2-HS/D13HD2-HS

Parameter	Requirement
Power rating	120 - 240 VAC, 50/60 Hz, 12 A
	200 - 240 VAC, 50/60 Hz, 7 A (rated for China, India, Taiwan, and Korea)
	100 VAC, 50/60 Hz, 13 A, 1200 W (rated for Japan)
AC input coupler	C14
Inrush current	80 A Maximum @240 VAC
Power consumption	1150 W Maximum

D16WU-HS/D16HD-HS

Parameter	Requirement
Power rating	120 - 240 VAC, 50/60 Hz, 12 A
	200 - 240 VAC, 50/60 Hz, 7 A (rated for China, India, Taiwan, and Korea)
	200 VAC, 50/60 Hz, 7 A, 1250 W (rated for Japan)
AC input coupler	C14
Inrush current	80 A Maximum @240 VAC
Power consumption	1410 W Maximum

D20WU-HS/D20HD-HS

Parameter	Requirement
Power rating	200 - 240 VAC, 50/60 Hz, 9 A
AC input coupler	C14
Inrush current	80 A maximum @240 VAC
Power consumption	1710 W Maximum

Physical specifications

Learn thedimensions and weight of the projector.

Description	
Projector size	
Overall size (L x W x H) (excluding lens, feet)	677 mm (26.6 in) x 596 mm (23.5 in) x 203 mm (8.0 in)
Overall size, shipping without lens (L x W x H) (includes packaging)	965 mm (38 in) x 795 mm (31.3 in) x 365 mm (14.4 in)
Projector weight	
Without lens	41.6 kg (91.52 lbs)
Shipping without lens (includes packaging)	53.3 kg (117.7 lbs)
Operating position	
360 degrees front to back and portrait capable	Free orientation and no tilt range constraint.

Accessories

Learn about the accessories (sold separately) available for the projector.

Lenses

Projection lens	Part number
Standard lens 1.5-2.0:1	140-110103-XX
Optional lens 1.2-1.5:1	140-109101-XX
Optional lens 0.84-1.02:1	140-114107-XX
Optional lens 1.02-1.36:1	140-115108-XX
Optional lens 2.0-4.0:1	140-111104-XX
Optional lens 4.0-7.2:1	140-116109-XX
Ultra short throw lens 0.38:1 (includes UST stabilizer plate)	900-300349-XX

Other accessories

Optional accessories	Part number
Wireless dongle	133-113106-XX / 140-134109-XX
Christie One Mount Plus	140-117100-XX
One Mount Extender rod	121-125109-XX
One Mount Rigging kit	121-126100-XX
Christie One Rigging Frame	140-113106-XX
Fog filter with frame	003-005714-XX
Fog filter module	003-005715-XX

Notice. If not avoided, the following may result in equipment or property damage.
- Use appropriate packaging when shipping the product installed in the frame.

Environment

Learn about the environment requirements for projector while operating and not operating.

Operating environment	
Temperature	0°C to 40°C (32°F to 104°F)
Humidity (non-condensing)	10% to 85% RH
Altitude	10,000 ft maximum at 0 to 30°C (32°F to 86°F)

Non-operating environment	
Temperature	-10°C to 60°C (14°F to 140°F)
Humidity (non-condensing)	5% to 90% RH

Regulatory

This product conforms to the following regulations related to product safety, environmental requirements and electromagnetic compatibility (EMC).

Safety

- CAN/CSA C22.2 No. 60950-1-07 – Information Technology Equipment – Safety – Part 1: General Requirements
- ANSI/UL 60950-1-2014 – Information Technology Equipment – Safety – Part 1: General Requirements
- IEC/EN 60950-1 – Information Technology Equipment – Safety – Part 1: General Requirements

Laser safety

- IEC 60825-1 – Safety of Laser Products – Part 1: Equipment Classification and Requirements
- IEC/EN 62471-5 - Photobiological safety of lamps and lamp systems – Part 5: Image projectors
- FDA CDRH 21CFR 1040 - Performance Standards For Light-Emitting Products

Electro-magnetic compatibility

Emissions

- FCC CFR47, Part 15, Subpart B, Class A - Unintentional Radiators
- CAN ICES-3 (A/B) / NMB-3 (A) - Information Technology Equipment (Including Digital Apparatus)
- CISPR 32:2014/EN 55032:2014, Class A - Information Technology Equipment
- IEC 61000-3-2/EN61000-3-2 - Limits for Harmonic Current Emissions
- IEC 61000-3-3/EN61000-3-3 - Limitations of Voltage Changes, Voltage Fluctuations, and Flicker

Immunity

- CISPR 24/EN55024 EMC Requirements - Information Technology Equipment

Environmental

- EU Directive (2011/65/EU) on the restriction of the uses of certain hazardous substances (RoHS) in electrical and electronic equipment and the applicable official amendment(s)

- EU Directive (2012/19/EU) on waste and electrical and electronic equipment (WEEE) and the applicable official amendment(s)

- Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) and the applicable official amendment(s)

- China Ministry of Information Industry Order No.39 (02/2006) on the control of pollution caused by electronic information products, hazardous substances concentration limits (SJ/T11363-2006), and the applicable product marking requirement (SJ/T11364-2006)