

# 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](http://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	
<b>Panel resolution and refresh rate</b>	
Pixel format (H x V square pixels)	1920x1080 (HD)/1920x1200 (WU)
Refresh rate	60 Hz
<b>Contrast ratio</b>	
Achievable contrast	250:1 ANSI, up to 1200:1 (Full Frame On/Off)
Dynamic contrast	6000:1
RealBlack contrast	2,000,000 :1
<b>Color and Gray scale resolution</b>	
Displayable colors	1.07 billion
Gray scale resolution	10 bits per RGB component
<b>White point</b>	
Nominal white (Full white in bright mode)	<ul style="list-style-type: none"> <li>• WU models: x = 0.290 +/- 0.02 y = 0.323 +/- 0.02</li> <li>• HD models: x = 0.290 +/- 0.02 y = 0.333 +/- 0.02</li> </ul>
<b>Nominal Gamma</b>	2.2 ±5%

## Control signal compatibility

Learn the control signal compatibility features for the projector.

Description	
<b>Ethernet port</b>	
Interface	10Base-T/100Base-TX
Connector	Female RJ45 with latch Female RJ45 without latch (HDBaseT)
<b>USB port</b>	
Interface	WLAN USB adapter, USB 2.0
Connector	USB type-A
<b>3D sync</b>	
Interface	TTL inputs and outputs
Connector	BNC male
<b>RS232 in</b>	
Connector	9-pin subminiature D, male
Bit rate	115,200 bps
Data format	1 start bit, 8 data bits, 1 stop bit, no parity
<b>Wired remote</b>	
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 the dimensions and weight of the projector.

Description	
<b>Projector size</b>	
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)
<b>Projector weight</b>	
Without lens	41.6 kg (91.52 lbs)
Shipping without lens (includes packaging)	53.3 kg (117.7 lbs)
<b>Operating position</b>	
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)