# 4K40-RGB Specifications

Learn about the product specifications. Due to continuing research, specifications are subject to change without notice.

### **Models**

This guide applies to the following models.

- D4K40-RGB
- Roadie 4K40-RGB

## **Product documentation**

For installation, setup, and user information, see the product documentation available on the Christie website. Read all instructions before using or servicing this product.

#### D4K40-RGB and Roadie 4K40-RGB

- 1. Access the documentation from the Christie website:
  - Go to this URL: http://bit.ly/2NIBz7a or https://www.christiedigital.com/en-us/business/products/projectors/3-chip-dlp.
  - 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 this product is available in the following documents.

- 4K40-RGB Product Safety Guide (P/N: 020-102957-XX)
- D4K40-RGB and Roadie 4K40-RGB Installation and Setup Guide (P/N: 020-102961-XX)
- D4K40-RGB and Roadie 4K40-RGB User Guide (P/N: 020-102958-XX)



- D4K40-RGB and Roadie 4K40-RGB Status System Guide (P/N: 020-102975-XX)
- D4K40-RGB and Roadie 4K40-RGB Serial Commands Guide (P/N: 020-102972-XX)
- 4K40-RGB Service Guide (P/N: 020-102960-XX)

# **Display**

Learn about the display specifications.

Description		
Panel resolution and refresh rate		
Pixel format (H x V square pixels)	4096 x 2160	
Processing path	Pixel rate: Maximum 530M pixel/second 60 Hz display rate Up to 12-bit per color	
Achievable contrast ratio	450:1 ANSI Up to 2000:1 with High Brightness lenses Up to 5000:1 with Ultra High Contrast lenses	
Color and grayscale resolution		
Displayable colors	35.2 trillion	
Grayscale resolution	45 bits total linear, 15 bits per pixel	
Nominal white point	x = 0.313 +/- 0.010 y = 0.329 +/- 0.010	
Nominal gamma	2.2 +/- 5%	

# **Control signal compatibility**

Ethernet port	
Interface	
Connector	Female RJ-45

3D sync	
Connector	BNC Male
Interface	TTL inputs and outputs

RS232 in	
Connector	9-pin subminiature D, female
Bit rate	115,200 bps
Data format	1 start bit, 8 data bits, 1 stop bit, no parity



GPIO	
Connector	DE-9 Male
Interface	CDS GPIO/3D Trigger Support - 7bit configurable

Wired remote	
Connector	3-pin XLR female
Interface	Custom

# **Optional input cards**

Learn about the input cards that may be used with the projector.

Input card	Part number	
Core3 option cards		
Dual 3G SD/HD-SDI (3GIC)	108-313101-02	
Dual Link DVI (DDIC)	108-312101-XX	
Twin DisplayPort (TDPIC)	108-451101-XX	
Twin HDMI (THIC)	108-311101-XX	
Coer4 option cards		
High Bandwidth Multi-Input Card (HBMIC)	144-116109-XX	
Quad Display Port Input Card (QDPIC)	144-114107-XX	
Terra SDVoE Input Card (TSIC)	144-132107-XX	



The -01 version of the Dual 3G SD/HD-SDI card is not supported.

# **Power requirements**

Learn the power requirements for 4K40-RGB.

Parameter	Requirement
Rated voltage	200 - 240 VAC
Rated current	20 A maximum
Line frequency	50-60 Hz
AC input coupler	IEC 309, 30 A/250 VAC

# **Physical specifications**

Learn the dimensions and weight of the projector.

Description	Dimensions	
Projector size		
Overall size, case only (L x W x H) (excluding lens, stack, and feet)	950 x 711 x 488 mm 37.4 x 28.0 x 19.2 inches	
Overall size (L x W x H) (includes skid)	1219 x 959 x 864 mm 48.0 x 37.8 x 34.0 inches	
Projector weight		
Without lens	120 kg (265 lbs)	
Shipping without lens (includes packaging)	145 kg (320 lbs)	
Operating position	Omni-directional	

## **Accessories**

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

#### Lenses

Projection lens	Part number
High brightness lenses	
0.72:1 HB fixed	144-110103-XX
0.9:1 HB fixed	144-111014-XX
1.13-1.31:1 HB zoom	144-103105-XX
1.13-1.66:1 HB zoom	144-129103-XX
1.31-1.63:1 HB zoom	144-104106-XX
1.45-2.17:1 HB zoom	144-130105-XX
1.63-2.17:1 HB zoom	144-105107-XX
1.95-3.26:1 HB zoom	144-131106-XX
1.99-2.71:1 HB zoom	144-106108-XX
2.71-3.89:1 HB zoom	144-107109-XX
3.89-5.43:1 HB zoom	144-108100-XX
Ultra high contrast lenses	
0.72:1 UHC fixed	163-116109-XX
0.9:1 UHC fixed	163-117100-XX



Projection lens	Part number
1.13-1.66:1 UHC zoom	163-118101-XX
1.45-2.17:1 UHC zoom	163-119102-XX
1.95-3.26:1 UHC zoom	163-120103-XX
2.71-3.89:1 UHC zoom	163-121105-XX
3.89-5.43:1 UHC zoom	163-122106-XX

#### Filters and coolant

Description	Part number
Radiator dust filter	003-006463-XX
Light engine filter	003-006464-XX
Coolant Propylene Glycol 740	003-005179-XX

#### Line cords

Description	Part number
Cord NA 250V/30A IEC309 (North America)	108-395108-XX
Cord CN 250V/30A IEC309 (China)	108-396109-XX
Cord KN 250V/30A IEC309 (Korea)	108-397100-XX
Cord JP 250V/30A IEC309 (Japan)	108-398101-XX
Cord EU 250V/32A IEC309 (Europe)	108-429106-XX
Cord AU 250V/32A IEC309 (Australia)	108-434102-XX

#### Other accessories

Description	Part number
IR remote	003-120918-XX
Mystique	900-100285-XX
Lens mount harness	003-112597-XX
Driver set	003-005250-XX
Rigging handles	163-125109-XX
Mirage Upgrade kit	163-129103-XX
Rigging Couplers kit	163-128102-XX

## **Environment**

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

Condition	Specification	
Operating environment		
Ambient temperature	5 to 40°C (41 to 104°F)	
Ambient humidity (non-condensing)	10 to 80% relative humidity	
Altitude	3000 meters (9843 feet) maximum at 5 to 25°C ambient	
Non-operating environment		
Ambient temperature	-25 to 70°C (-13 to 158°F)	
Ambient humidity	10 to 90% RH	

## Regulatory

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

## **Safety**

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

## **Electro-magnetic compatibility**

#### **Emissions**

- CAN ICES-003 (A)/NMB-003 (A) Information Technology Equipment (Including Digital Apparatus) – Limits and Methods of Measurement
- CISPR 32:2012/EN 55032:2012, Class A Electromagnetic Compatibility of Multimedia Equipment Emission Requirements
- FCC CFR47, Part 15, Subpart B, Class A Unintentional Radiators
- IEC 61000-3-11/EN61000-3-11: Limitations of Voltage Changes, Voltage Fluctuations, and Flicker for equipment with rated current ≤ 75 A
- IEC 61000-3-12/EN61000-3-12: Limits for harmonic current emissions for equipment for systems with input current > 16 A and ≤ 75 A per phase



#### **Immunity**

 CISPR 24:2010/EN55024:2010 EMC Requirements – Information Technology Equipment – Immunity Characteristics – Limits and Methods of Measurements

#### **Environmental**

- China Ministry of Information Industry (along with 7 other Government Agencies) Order No.32 (01/2016) on the control of pollution caused by electronic information products, hazardous substances concentration limits (GB/T 26572 2011), and the applicable product marking requirement (SJ/T 11364 2014).
- 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 on the registration, evaluation, authorization and restriction of chemicals (REACH) and the applicable official amendment(s).