

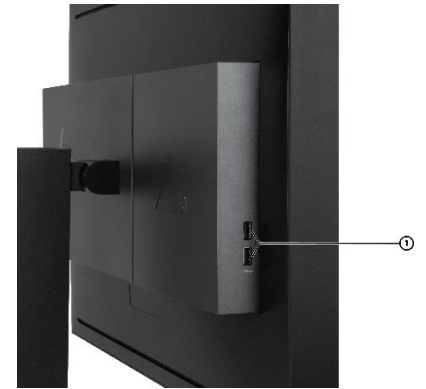
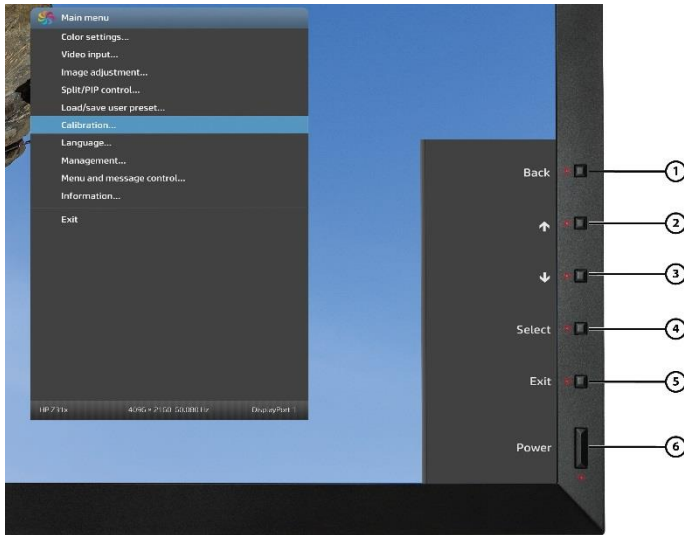
Technical Specifications

HP DreamColor Z31x Studio Display



1. **Color preset**
 2. **Video input**
 3. **Luminance**
 4. **Display info**
 5. **Open menu**
 6. **Power**
-

Technical Specifications

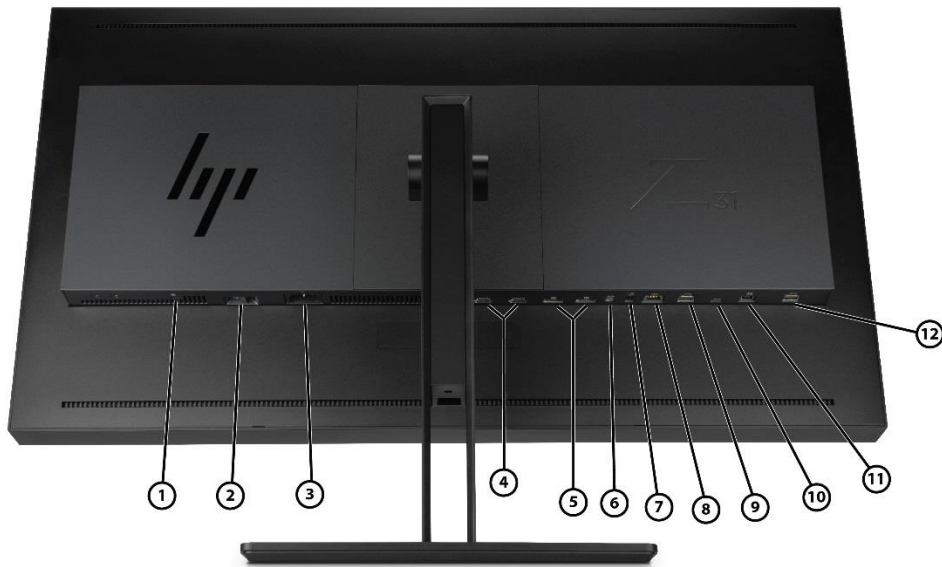


Controls

- | | | |
|------------------------|-----------------------|---------------------|
| 1. Color preset | 2. Video input | 3. Luminance |
| 4. Display info | 5. Open menu | 6. Power |

Side

- 1. (2) USB 3.0**



- | | |
|---------------------------------|---|
| 1. Security Lock Slot | 7. KVM Keyboard Connection (USB) |
| 2. Power Switch | 8. RJ-45 Network Connector |
| 3. Power Cable Connector | 9. (2) DreamColor Ports (USB) |
| 4. (2) HDMI 2.0 | 10. USB Type-C™ |
| 5. (2) DisplayPort™ 1.2 | 11. USB 3.0 Type-B |
| 6. Audio out (analog) | 12. (2) USB 3.0 Type-A |

Technical Specifications

Models: 1JR59A4

Panel	<p>Type 31.1-inch Real IPS, LED Backlit</p> <p>Viewable Image Area (diagonal) 79 cm (31.1 in) widescreen; diagonally measured</p> <p>Panel Active Area (W x H) 69,8 x 36,8 cm (27.48 x 14.49 in.)</p> <p>Panel Type Real IPS</p> <p>Native Resolution/Timing 4096 × 2160 @ 60 Hz¹</p> <p>Aspect Ratio 17:9</p> <p>Viewing Angle (typical) Up to 178° horizontal/178° vertical (10:1 minimum contrast ratio)</p> <p>Brightness (typical)* 250 cd/m²**</p> <p>Static Contrast Ratio (typical)* 1,500:1</p> <p>Static Contrast Ratio (minimum)* 1,200:1</p> <p>Dynamic Contrast Ratio (typical)* N/A</p> <p>Flicker Free Yes</p> <p>Response Time (typical)* 10 ms with Overdrive enabled</p> <p>Pixel Pitch (H) 0.1704 × (V) 0.1704</p> <p>Pixels Per Inch (PPI) 149</p> <p>Backlight Lamp Life (to half brightness) 30,000 hours minimum</p> <p>Panel Bit Depth True 10-bit (Up to 1.07 Billion colors)</p> <p>Color Gamut 100% of sRGB, 100% of BT.709, 100% of AdobeRGB, 99% of DCI-P3, 80% of BT.2020</p>
	<p>*All performance specifications represent the typical specifications provided by HP's component manufacturers; actual performance may vary either higher or lower.</p> <p>** HP applied uniformity compensation to each Z31x display, which brings the typical uniform peak luminance down to 250 cd/m² from a 350 cd/m² native peak brightness. Display supports luminance calibration up to 250 cd/m², reserving any luminance headroom for panel aging compensation.</p>
User Controls	<p>On Screen Display (OSD) User Controls Color settings, Video input, Image scaling, Markers, Digital cinema region, PIP/Split, User preset, Calibration, Language, Management, Menu and message control, Information</p> <p>Monitor Control Buttons or Switches Power, 5 OSD buttons</p> <p>User-Assignable Function Buttons Yes, 4 (19 options)</p> <p>Languages 10 (English, Spanish, German, French, Italian, Netherlands, Portuguese, Japanese, T-Chinese and S-Chinese)</p>
Color Management	<p>Factory Color Calibrated Yes</p> <p>Factory Color Presets DCI P3 D65, BT.709, BT.2020, sRGB D65, sRGB D50, Adobe RGB D65, EPD, Native</p> <p>Color Space / Subsampling Support RGB 4:4:4, YCbCr 4:4:4, YCbCr 4:2:2, YCbCr 4:2:0</p> <p>Default Color Temperature D65</p> <p>Low Blue Light Modes Yes</p> <p>RGB Channel Adjust Yes, Setup and Gain, downstream from color preset</p> <p>User Calibration Support Integrated</p> <p>Integrated Calibration Instrument Yes</p> <p>External Calibration Instrument Support X-Rite i1Display Pro, X-Rite- i1 Pro, Klein K10-A, Photo Research PR-6xx/7xx, Colorimetry Research CR-100/CR-250, Konica Minolta CA-310</p> <p>Standalone/Schedulable Calibration Yes</p>

Technical Specifications

	Scriptable Calibration	Yes	
Signal Interface/ Performance	Horizontal Frequency	30 – 135 kHz	
	Vertical Frequency	24-60 Hz	
	Native Resolution	4096 × 2160 @ 60 Hz ¹	
	Preset VESA Graphic Modes (non-interlaced)		640 × 480 @ 60 Hz
			720 × 400 @ 70 Hz
			800 × 600 @ 60.317 Hz
			1024 × 768 @ 60.004 Hz
			1280 × 720 @ 24 Hz
			1280 × 720 @ 30 Hz
			1280 × 720 @ 50 Hz
			1280 × 720 @ 60 Hz
			1280 × 1024 @ 60.020 Hz
			1366 × 768 @ 60.000 Hz
			1920 × 1080 @ 23.976 Hz
			1920 × 1080 @ 24 Hz
			1920 × 1080 @ 30 Hz
			1920 × 1080 @ 50(i) Hz
			1920 × 1080 @ 50 Hz
			1920 × 1080 @ 59.94(i) Hz
			1920 × 1080 @ 59.94 Hz
		1920 × 1080 @ 60.000 Hz	
		1920 × 1200 @ 59.950 Hz	
	1920 × 1200 @ 59.995 Hz		
	2048 × 1080 @ 24.000 Hz		
	2048 × 1080 @ 48.000 Hz		
	2048 × 1080 @ 60.000 Hz		
	3840 × 2160 @ 24 Hz		
	3840 × 2160 @ 25 Hz		
	3840 × 2160 @ 30 Hz		
	3840 × 2160 @ 47.952 Hz		
	3840 × 2160 @ 48 Hz		
	3840 × 2160 @ 50 Hz		
	3840 × 2160 @ 60 Hz		
	4096 × 2160 @ 23.976 Hz		
	4096 × 2160 @ 24 Hz		
	4096 × 2160 @ 47.952 Hz		
	4096 × 2160 @ 48 Hz		
	4096 × 2160 @ 59.94 Hz		
	4096 × 2160 @ 60 Hz		
	2048 × 2160 @ 60 Hz		
	Maximum Pixel Clock Speed	600 MHz	
	Anti-Glare Panel	Yes	
	Default Color Temperature	D65 (6504K)	

Technical Specifications

VIDEO/OTHER INPUTS

Connector Types	DisplayPort™	(2) DisplayPort™ 1.2
	HDMI	(2) HDMI 2.0
	HDCP support	Yes, all video inputs
	Audio	(1) Audio out (analog)
	Network	(1) RJ-45 Network Connector
USB Port Specifications	USB Version	3.0
	USB Hub	Yes
	Downstream Ports	4, Type A
	Upstream Ports	1, Type B
	Fast Charging USB Ports	2 Ports (side)
	HP DreamColor USB Ports	2, USB 3.0
	KVM Keyboard Port	Yes
	Power Output Maximum	Fast Charging 12.5 W; Standard 4.75 W
USB-Type C™ Port Specifications	USB-Type C™ Version	USB 3.1 Gen1 / 5G bps
	USB-Type C™ Hub	No (USB-C™ can provide upstream to USB Type-A Hub)
	Downstream USB-Type C™ Ports	0
	Upstream USB-Type C™ Ports	1
	Video Support	USB-C Alt mode – DisplayPort™ 1.2
	Power Output	5V/5.25V/9V/10V/12V/15V/20V, 3A
	Power Output Maximum	60W Max

Cables Included	Video Cables Included	(1) HDMI 1,8 m (5.9 ft), (1) DisplayPort™ 1,8 m (5.9 ft)
	USB Cables Included	(1) USB Type-C™ 1,8 m (5.9 ft) (1) USB Type-C™ to Type-A cable 1,8 m (5.9 ft) (1) USB Type-B to Type-A cable 1,8 m (5.9 ft)

POWER

Power	Power Supply	Internal
	Input Power	100 – 240 VAC 50/60 Hz
	Typical Power²	120 W
	Maximum Power³	260 W
	Energy Saving/Standby Mode	0.5 W
	Power Cable Length	1,9 m (6.2 ft)

DIMENSIONS AND WEIGHT

Mechanical	Dimensions (W x D x H)	Unpacked w/stand (highest setting)	73,80 x 24,80 x 56,60 cm (29.06 x 97.64 x 22.38 in)
		Unpacked w/o stand (head only)	73,80 x 8,26 x 41,41 cm (29.06 x 3.25 x 16.30 in)
		Packaged	88,80 x 38,80 x 53,60 cm (34.96 x 15.28 x 21.10 in)
	Weight	Head Only	9,9 kg (21.83 lb)
		Unpacked	15 kg (33 lb)
		Packaged	18,5 kg (40.7 lb)

MONITOR FEATURES

Plug and Play	Yes
Color	Black
Integrated Quick Release⁹	An easy-to-use, VESA-compliant, LCD monitor mounting solution that allows you to quickly and securely attach an LCD monitor to a variety of stands, brackets, arms or wall mounts.

Technical Specifications

	Cable Management	Enhanced cable management for easy concealment of power, video and USB cables. Effortless routing of cables through the cable management tunnel at the base of the column.
	Detachable Stand	Yes, ships detached
	Tilt Range	–5° to +20° vertical
	Swivel Range	–45° to +45°R
	Display height adjustment:	Adjustment Range: 144 mm Min (desk to bottom of display): 11 mm Max (desk to bottom of display): 155 mm
	Pivot Rotation	N/A
	VESA Mounting	Yes, 100 mm Integrated with mount
	Security Lock-Ready	Yes
SPECIAL FEATURES	Picture-in-Picture, Picture-by-Picture	Yes
	KVM Switch	Yes, Keyboard/OSD-control
	Remote Manageability	Yes, Web Dashboard, Host API, WS-Management
	User Presets	Yes
	True 2K Image Scaling	Yes
	Digital Cinema Region Masking	Yes, 1.85:1, 2.39:1
	Marker Overlays	Yes, preset and programmable
	Video legal limiting (64–960)	Yes, all inputs
	Rename Video Inputs	Yes
	User Updateable Firmware	Yes
ENVIRONMENTAL Specifications	Temperature - Operating	5° to 35° C (41° to 95° F)
	Temperature - Non-operating	–20° to 60° C (–4° to 140° F)
	Humidity – Operating	20% to 80% Relative Humidity non-condensing
	Humidity – Non-operating	5% to 95%, 38.7° C max wet-bulb
	Altitude – Operating	0 to 5,000 m (0 to 16,404 ft)
	Altitude – Non-operating	0 to 12,192 m (0 to 40,000 ft)
	White LED Backlights	Yes
	CCFL Panel	No
	Arsenic-Free Display Glass	Yes
	Low Halogen⁴	Yes (except cables, SOC board and colorimeter motor)
	Mercury-Free Display Backlights	Yes
OPTIONS (EACH SOLD SEPARATELY)	HP B500 PC Mounting Bracket — Part number 2DW52AA	Maximize your available work area with a single-footprint solution. Simply attach the bracket to the back of your display, and your PC platform to the bracket via the 100mm VESA pattern. It's that easy!
	HP DisplayPort™ Cable Kit —Part number VN567AA	Connects a DisplayPort™ connector on an HP Business Desktop computer to a DisplayPort™ connector on a monitor

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**HP Business PC Security Lock Kit—
Part number PV606AA**

Attaches to the rear of the PC with a six-foot steel cable that can be used to secure a PC or peripherals such as mice, keyboards, monitors or USB security devices to protect them against unauthorized removal by physically connecting the system to an anchor point.

WHAT'S IN THE BOX?

What's in the box?	Monitor and Accessories	HP DreamColor Z31x Studio Display, AC power cord, (1) HDMI 1,8 m (5.9 ft), (1) DisplayPort™ 1,8 m (5.9 ft) (1) USB Type-C™ 1,8 m (5.9 ft) (1) USB Type-C™ to Type-A cable 1,8 m (5.9 ft) (1) USB Type-B to Type-A cable 1,8 m (5.9 ft) Accessory bracket Rear cover for VESA mounting
	Documentation	CD (includes user guide, warranty, drivers, calibration report)
Other	Software included	N/A
	User Guide Languages	English, Arabic, S. Chinese, T. Chinese, Czech, Danish, Dutch, Finnish, French, German, Greek, Hungarian, Italian, Japanese, Kazakh, Korean, Norwegian, Polish, Brazilian Portuguese, Russian, Slovenian, Spanish, Swedish and Turkish.
	Warranty Languages	English, Arabic, S. Chinese, T. Chinese, Czech, Danish, Dutch, Finnish, French, German, Greek, Hungarian, Italian, Japanese, Kazakh, Korean, Norwegian, Polish, Brazilian Portuguese, Russian, Slovenian, Spanish, Swedish and Turkish.
	Country of Origin	China

CERTIFICATION AND COMPLIANCE

Certification and Compliance	Microsoft WHQL Certification (Windows 10), SmartWay Transport Partnership (NA only), CEL/EUP Lot-5/EUP Lot-6/CE/CB/TUV GS/TUV ERGO/ISO 9241-307/CSA/FCC/ICES/KC/KCC/E-STAND BY/Vietnam MEPS/S-MARK/VCCI/CCC/BSMI/CECP
Compatibility	Compatible with platforms using the VESA standard video modes. Recommended for use with HP products.
Service and Warranty	Protected by HP, including a 3 year standard limited warranty. Optional HP Care Pack Services are extended service contracts that extend your protection beyond the standard warranties. ⁵
Zero Bright Dot Policy*	Yes

*The HP Pixel Policy allows no bright sub-pixel defects for this display. For complete details, see <http://support.hp.com/us-en/document/c00288895>.

Technical Specifications

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1. The video card of the connected PC must be capable of supporting 4096 × 2160 at 60 Hz with 10-bit color using one DP, HDMI, or USB-C (DP alt mode).
2. Default Power is measured with factory defaults, including factory default brightness and USB ports loaded at 25% of maximum.
3. Maximum Power is measured with monitor at maximum brightness and with USB ports loaded at 100% of maximum.
4. External power supplies, power cords, cables and peripherals are not Low Halogen. Service parts obtained after purchase may not be Low Halogen.
5. Service levels and response times for HP Care Pack Services may vary depending on your geographic location. Service starts from date of hardware purchase. Restrictions and limitations apply. See <http://www.hp.com/go/cpc> for details.

