

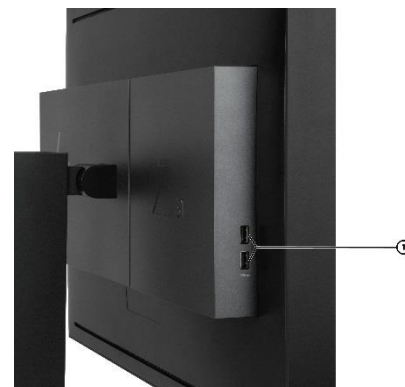
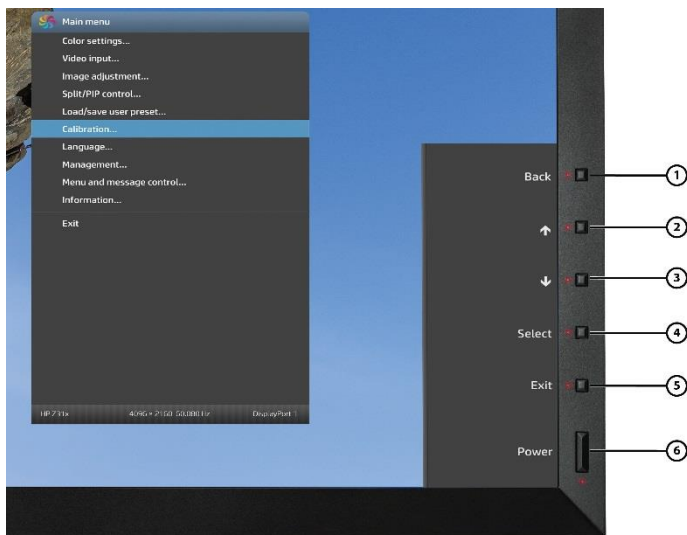
Technical Specifications

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

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	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)

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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)
USB Port Specifications	Network	(1) RJ-45 Network Connector
	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.

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	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
ENVIRONMENTAL Specifications	User Updateable Firmware	Yes
	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>.

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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.

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Change Log	