Overview

HP Zvr 23.6-inch Virtual Reality Display
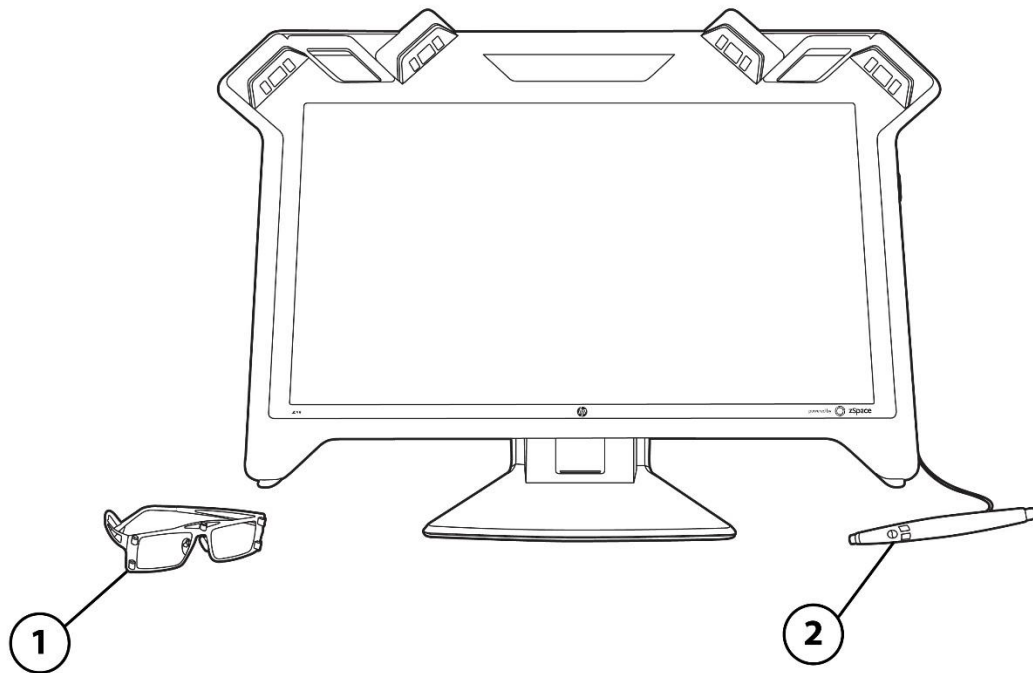
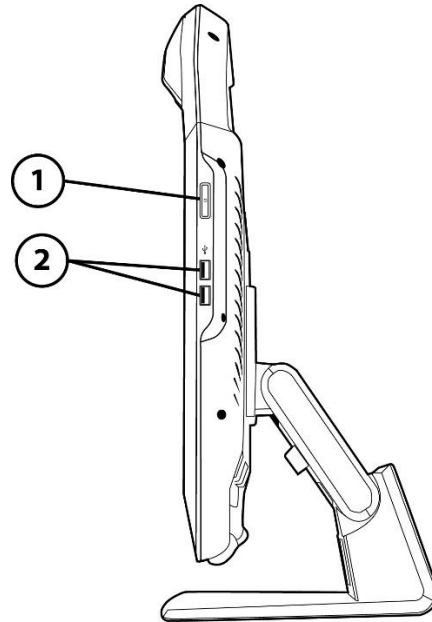**1.** Passive eyewear   **2.** Active stylus
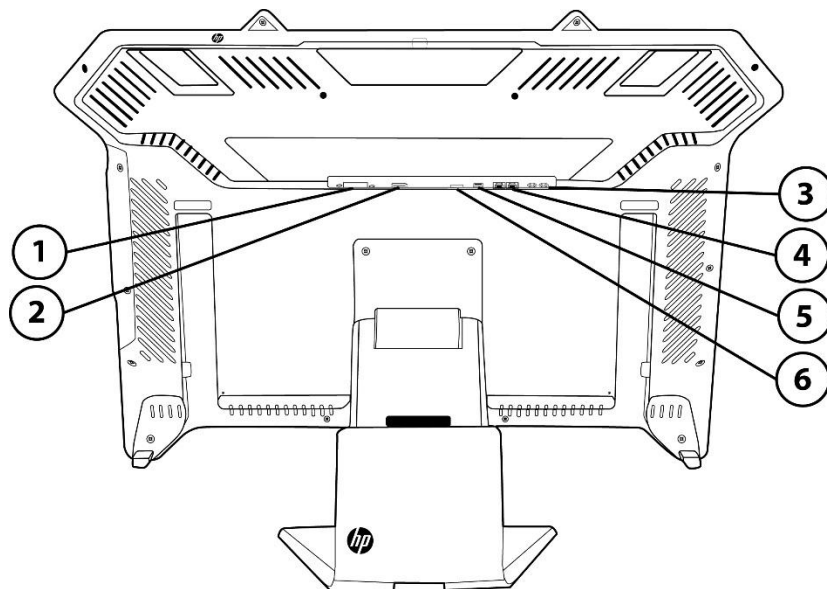
1.	DVI-D, Dual Link	**4.**	RJ-11 (stylus)
2.	DisplayPort 1.2	**5.**	DC in
3.	USB 2.0	**6.**	USB 2.0 upstream

Overview

1.	Master power switch	**2.**	USB 2.0 ports

Overview

Change the way you think, work, and create with a virtual-holographic 3D[1] image from the HP Zvr 23.6-inch Virtual Reality Display.

Key features:

- Experience real-time, natural interaction with your 3D[1] content as the display follows the movement of your lightweight, passive glasses.[2,3]
- Immerse yourself in every detail of the holographic image with the stylus pen.[3]
- Project your 3D[1] models to a 2D big screen with choice of third-party hardware.[4]
- Easily drive your content from an HP Z Workstation or HP Business Desktop with DVI or DisplayPort connectors.
- Create your own niche-specific software with the zSpace Developer Kit.[5]
- Get award-winning service and support, and extend your protection with optional HP Care Packs.[6]

1   3D content is required for 3D performance.
2   User must be wearing 3D glasses for tracking to occur.
3   3D glasses, 3D glass clip-on, and stylus pen are included.
4   Sold separately.
5   Download from zSpace website at http://developer.zspace.com.
6   HP Care Pack Services are sold separately. 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 www.hp.com/go/cpc for details. HP services are governed by the applicable HP terms and conditions of service provided or indicated to Customer at the time of purchase. Customer may have additional statutory rights according to applicable local laws, and such rights are not in any way affected by the HP terms and conditions of service or the HP Limited Warranty provided with your HP Product.

Change Log

Models: K5H59A4

Panel	Type	23.6-inch TN with segmented LED backlight
	Viewable Image Area (diagonal)	**59,94 cm** (23.6-inch) widescreen; diagonally measured
	Panel Active Area (W × H)	**52,12 x 29,32 cm** (20.52 × 11.54 in)
	Resolution	1920 x 1080 @ 120Hz (typical 3D mode of operation)
	Aspect Ratio	16:9
	Viewing Angle*	Up to 170° horizontal/160° vertical typical
	Brightness*	200 cd/m² in 3D mode of operation
	Contrast Ratio (Typical)*	300:1 average in 3D mode of operation 1000:1 average in 2D mode
	Response Times*	5.6 ms on/off without overdrive
	Pixel Pitch*	0.272 mm
	Pixels Per Inch (PPI)*	93.5
	Backlight Lamp Life (to half brightness)*	30,000 hours minimum
	Color Support*	Up to 16.7 million colors with the use of FRC technology
	Color Gamut (Typical)*	72% of NTSC

* Performance specifications represent the typical specifications provided by HP's component manufacturers; actual performance may vary either higher or lower.

User Controls	**Buttons or Switches**	Right side: power button (press once to turn-off backlight; press 4 seconds for "soft OFF")
	User Programmable Modes	N/A
	Languages	None
	On Screen Display (OSD) User Controls	No OSD
	Audio Controls	N/A
Signal Interface/ Performance	**Horizontal Frequency**	24 - 80 kHz
	Vertical Frequency	60 - 120 Hz
	Native Resolution	1920 x 1080 @ 120Hz (typical 3D mode of operation)
	Preset Graphic Modes (non-interlaced)	640 x 480 @ 60Hz 1920 x 1080 @ 60 Hz 1920 x 1080 @ 120Hz (typical 3D mode of operation)
	Maximum Pixel Clock Speed	285.5 MHz
	Anti-Glare	Yes
Video/Other Inputs	**Plug and Play**	Yes
	Input/Output Connectors	(1) DVI-D, Dual Link

Change Log

		(1) DisplayPort 1.2	
		HDCP support on all inputs	
	USB	5 USB 2.0 [4 downstream, 1 upstream]	
	Video Cables Included	(1) DisplayPort **1,8 m** (5.9 ft) (1) USB 2.0 **1,8 m** (5.9 ft)	
	Audio	N/A	
	Cameras	4 IR cameras, for head and stylus tracking	
Multimedia	**Speakers**	N/A	
Power	**Power Supply**	External	
	Input Power	100 - 240 VAC 50/60 Hz	
	Maximum Power	90 W	
	Typical Power	65W typical with 3D mode enabled	
	Energy Saving/Standby Mode	12W standby and 0.5W "Soft OFF"	
	Power Cable Length	**1,8 m** (5.9 ft)	
Mechanical	**Dimensions** (W × D × H)	**Unpacked w/stand**	**69 x 28,29 x 52,53 cm** 27.17 x 11.14 x 20.68 in
		Unpacked w/o stand (head only)	**69 x 6,81 x 52,53 cm** (27.17 x 2.68 x 20.68 in)
		Packaged	**78,8 x 62,5 x 38 cm** (31.2 x 24.6 x 14.96 in)
	Weight	**Head Only**	**5,92 kg** (13.024 lb)
		Unpacked	**9,1 kg** (20.02 lb)
		Packaged	**14,3 kg** (31.526 lb)
Ergonomic Features	**Detachable Stand**	Yes	
	Height Adjustment	Yes, 162 mm (at full recline)	
	Tilt Range	-7° to + 60°	
	Swivel	N/A	
	Pivot	N/A	
Environmental	**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% 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	

Change Log

	Low Halogen	No
	Mercury-Free Display Backlighting	Yes
Options	**N/A**	
What's in the box?	**Monitor and Accessories**	HP Zvr 23.6-inch Virtual Reality Display, AC power cord 1,8 m (5.9 ft), External power supply (90W), DisplayPort cable 1,8 m (5.9 ft), USB cable 1,8 m (5.9 ft), (1) Active stylus, (1) Passive eyewear, (1) Passive Eyewear clip-ons
	Documentation	DVD (includes user guide, warranty, drivers)
	Software	• Zvr system software • Zvr Experience - Demo software
Other	**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.
	Color	Black
	VESA Mounting	100 mm VESA mount
	Security Lock-Ready	No
	Country of Origin	China
Certification and Compliance	UL/CSA, CE, FCC marking, CB, FCC Class A for EMEA and FCC Class B for ROW, Microsoft Windows 7, SmartWay Transport Partnership (NA only)	
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.[1]	

1.   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 www.hp.com/go/cpc for details.

Change Log

Change Log	