

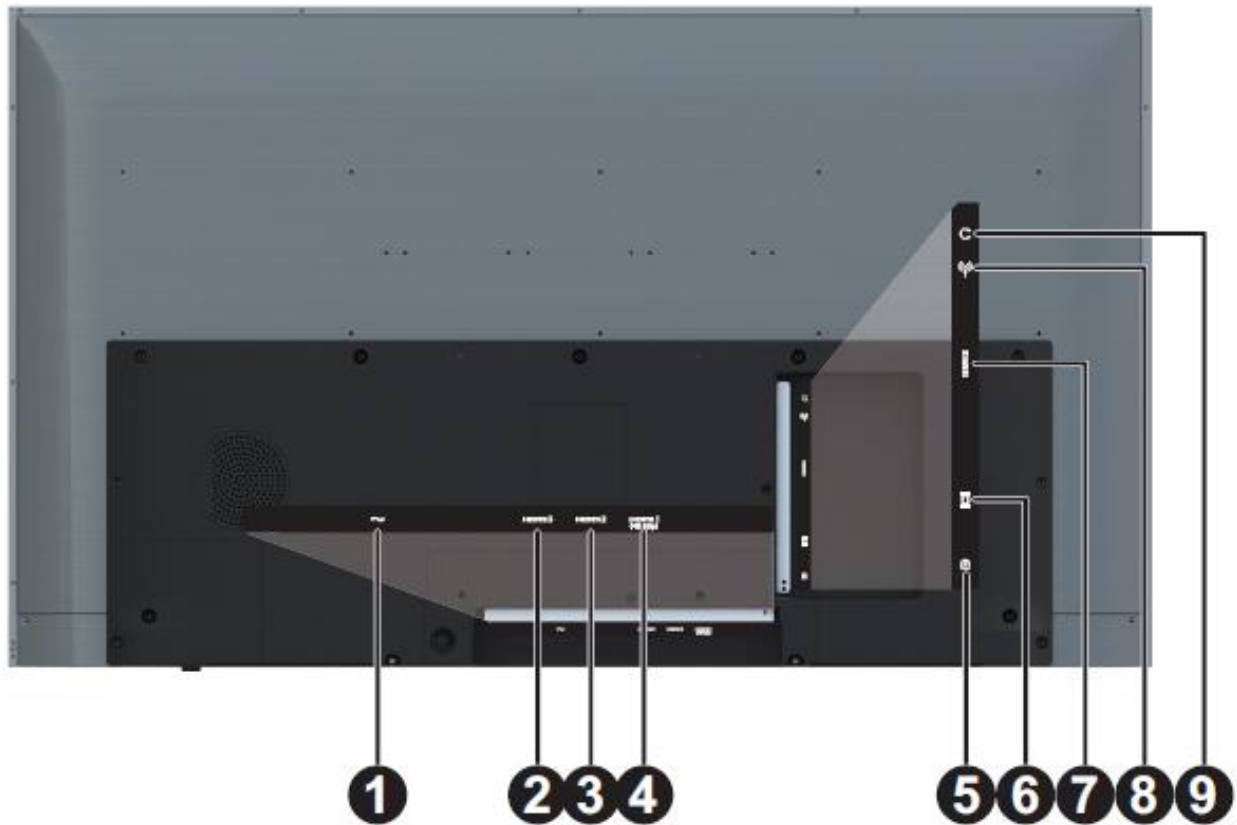
Overview

HP LD4312 4K Large Format Display



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HP LD4312 4K Large Format Display



1. Power connector
2. HDMI3 connector (HDMI 1.4)
3. HDMI2 connector (HDMI 1.4)
4. HDMI1 connector (HDMI 2.0)
5. DisplayPort™ connector (DisplayPort™ 1.2)

6. VGA connector
7. USB connector
8. Audio input
9. Headphone output

Technical Specifications

Model: 3XE86A8

Panel Specifications*	Display Size (Diagonal)	43-in
	Display Panel Type	ADS
	Native Resolution/Timing	3840×2160 @ 60Hz
	NOTE: DP 1.2 or HDMI 2.0 support native 3840 x 2160	
	Panel Bit Depth	8-bit
	Aspect Ratio	16:9
	Brightness - Typical	250 nits
	Static Contrast Ratio - Typical	800:1
	Static Contrast Ratio - Minimum	700:1
	Dynamic Contrast Ratio	8,000,000:1(Typ.)
	NOTE: Dynamic Contrast Ratios during video playback only, depending on series of frames or time duration.	
	Flicker Free	Yes
	Pixel Pitch	81.7(H) x 245.1(V)
	Pixels Per Inch (PPI)	102.46
	Backlight Lamp Life (to half brightness - in hours)	30k
	Response Time – Typical	8ms (GTG)
	Horizontal Viewing Angle (typical CR>10)	178°
	Vertical Viewing Angle (typical CR>10)	178°
	Panel Active Area (w x h)	941.184 (H) x 529.416 (V)mm
	Preset Graphic Modes/Supported Resolutions	640 x 480@60Hz 720 x 480@60Hz 720 x 400@70Hz 800 x 600@60Hz 1024 x 768@60Hz 1280 x 720@60Hz 1280 x 800@60Hz 1280 x 1024@60Hz 1366 x 768@60Hz 1440 x 900@60Hz 1600 x 900@60Hz 1680 x 1050@60Hz 1920 x 1080@60Hz 1600 x 1200@60Hz 1920 x 1200@60Hz 2560 x 1440@60Hz 2560 x 1600@60Hz 3840 x 2160@24Hz 3840 x 2160@25Hz 3840 x 2160@30Hz 3840 x 2160@50Hz 3840 x 2160@60Hz
	Maximum Resolution	3840 ×2160 @ 60Hz
	Recommended Resolution	3840 ×2160 @ 60Hz
	Vertical Scan Range	24Hz~60Hz
	Horizontal Scan Range	27kHz~136kHz
	Maximum Pixel Clock Speed	600 MHz

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

Technical Specifications

Color Gamut Coverage	NTSC	68%
Color Management	Factory Color Presets	Native
	Color Space / Subsampling Support	RGB 4.4,4
	Default Color Temperature	Native
	RGB Channel Adjust	Yes, Gain
Monitor Specifications	Exterior Color of Monitor Bezel and Stand	Sky Gray
	Plug & Play	Yes
	VESA Mounting	Yes, 200x200mm
	Security Lock Ready	Yes
	Warranty	3/3/0; 3/3/3
Multimedia	Speakers (eg 4 speakers)	Yes, 2 speakers
	Speakers Output Power	6 W per channel
On Screen Display (OSD)	On Screen Display User Controls	Brightness... Color Control... Input Control... Image Control... Audio Control... PIP Control... Power Control... Menu Control... Management... Information...
	User Programmable Modes	Yes, 20
	Monitor Control Buttons or Switches	5-in-1 Joystick Control, Menu, Minus ("-"), Plus ("+") /Input Control, OK/Auto, Power
	User-Assignable Function Buttons	Yes, 3 (9 options)
	Audio Controls	Yes, Volume
	Languages	10 (English, Spanish, German, French, Italian, Netherlands, Portuguese, Japanese, T-Chinese and S-Chinese)
Connector Types	DisplayPort™	Yes, Displayport™ 1.2 x1 (3840x2160 @60Hz)
	HDMI	Yes, HDMI 2.0/HDCP2.2 x 1 + HDMI 1.4/HDCP1.4 x 2
	VGA	Yes
	HDCP Support	Yes, HDMI 2.0/HDCP2.2 x 1 + HDMI 1.4/HDCP1.4 x 2 + DP1.2/HDCP1.3 x 1
	Audio Output	Yes, Analog. speaker 6W+6W
	Audio Input	Yes, Analog
USB Port Specifications	USB Version	2.0
	Upstream Ports	1 port, Service Data input only.
Special Features	Picture-in-Picture, Picture-by-Picture	Yes
	User Updateable Firmware	Yes (in service mode)
Power & Operating Specs	Power Supply	Internal
	Power Source	100 – 240 VAC 50/60 Hz
	Power Consumption – Maximum	100 W
	Energy Saving/Standby Mode	0.5 W
	Power Consumption – Typical	82 W
	Power cable length	1.83m

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Operating Conditions	Operating Temperature - Celsius	0°C to 40°C	
	Operating Temperature - Fahrenheit	32°F to 104°F	
	Non-operating Temperature - Celsius	-20°C to 60°C	
	Non-operating Temperature - Fahrenheit	-4°F to 140°F	
	Operating Humidity	20 to 80% non-condensing	
	Non-operating Humidity	0%~90%	
	Operating Altitude	5000m	
Environmental Features and Certifications	Mercury-free LED display backlighting	Yes	
	Agency Approvals and Certifications	WW application CE/CB/KC/MSIP/e-standby/Bauart/ErP/MPRII/ICE/TUV-S/EAC/cTUVus/PSB/ISC/CCC/CEL/CECP/SEPA/GOST-R/SII/Energy Star/ISC/VCCI/FCC/BSMI/S-Mark/SASO/SABS/Mexico energy/Mexico CoC/PSE/C-tick/BIS/EU REACH/EU RoHS/Voluntary materials restrictions/WEEE	
Unit Product/Package Specifications	ENERGY STAR® Qualified	Yes	
	EPEAT® Registered	Yes, Silver	
	Regions need to verify by country		
	China Energy Label	CEL Grade 2	
	SmartWay Transport Partnership - NA only	Yes	
Product Dimensions	Product Dimensions	1080 x 150 x 652 mm	42.52 x 5.91 x 25.67 in
	Display Head Dimensions	961.4 x 69.6 x 553.7 mm	37.85 x 2.74 x 21.80 in
	Bezel Measurements	Top 16mm Side 16 mm Bottom 24.8mm	Top: 0.63 in Side: 0.63 in Bottom: 0.98in
Pallet Information	Pallet Dimensions (L x W x H)	1080 x 1080 x 120mm	42.51 x 42.51 x 4.72 in
	Pallet Layers	3	
	Pallet Product per Layer	7	
	Total Products per Pallet	21	
	Container Load, 20-Foot	210	
	Container Load, 40-Foot	462	
What's in the box?	Documentation	Remote controller, Power cord, DP cable, HDMI cable, VGA cable, Warranty card, Production notice	
	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.	
Other	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.	

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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

Environmental Data	Eco-Label Certifications & declarations	This product has received or is in the process of being certified to the following approvals and may be labeled with one or more of these marks: <ul style="list-style-type: none"> IT ECO declaration US ENERGY STAR® EPEAT® Gold registered in the United States. See http://www.epeat.net for registration status in your country 		
	Energy Consumption (in accordance with US ENERGY STAR® test method)	115VAC, 60Hz	230VAC, 50Hz	100VAC, 50Hz
	Normal Operation	60.56 W	59.23 W	60.67 W
	Sleep	0.36 W	0.47 W	0.35 W
	Off	0.97 W	0.83 W	0.97 W
	Heat Dissipation*	115VAC, 60Hz	230VAC, 50Hz	100VAC, 50Hz
	Normal Operation	207 BTU/hr	203 BTU/hr	207 BTU/hr
	Sleep	1 BTU/hr	2 BTU/hr	1 BTU/hr
	Off	3 BTU/hr	3 BTU/hr	3 BTU/hr
		*NOTE: Heat dissipation is calculated based on the measured watts, assuming the service level is attained for one hour.		
	Additional Information	<ul style="list-style-type: none"> This product is in compliance with the Restrictions of Hazardous Substances (RoHS) directive - 2002/95/EC. This HP product is designed to comply with the Waste Electrical and Electronic Equipment (WEEE) Directive – 2002/96/EC. This product is in compliance with California Proposition 65 (State of California; Safe Drinking Water and Toxic Enforcement Act of 1986). This product is in compliance with the IEEE 1680 (EPEAT) standard at the gold level, see www.epeat.net Plastics parts weighing over 25 grams used in the product are marked per ISO 11469 and ISO1043. This product contains 0% post-consumer recycled plastic (by wt.) This product is 95.9 % recycle-able when properly disposed of at end of life. 		
	Packaging Materials	External:	PAPER/Corrugated	1682 g
		Internal:	PLASTIC/Polyethylene Expanded - EPE	67 g
		PLASTIC/Polystyrene Expanded - EPS	451 g	
		PLASTIC/Polyethylene low density - LDPE	9 g	
RoHS Compliance	HP, Inc. is committed to compliance with all applicable environmental laws and regulations, including the European Union Restriction of Hazardous Substances (RoHS) Directive. HP's goal is to exceed compliance obligations by meeting the requirements of the RoHS Directive on a worldwide basis. By July 1, 2006, RoHS substances will be virtually eliminated (virtually = to levels below legal limits) for all HP electronic products subject to the RoHS Directive, except where it is widely			

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		recognized that there is no technically feasible alternative (as indicated by an exemption under the EU RoHS Directive).
	Material Usage	<p>This product does not contain any of the following substances in excess of regulatory limits (refer to the HP General Specification for the Environment at http://www.hp.com/hpinfo/globalcitizenship/environment/pdf/gse.pdf):</p> <ul style="list-style-type: none"> • Asbestos • Certain Azo Colorants • Certain Brominated Flame Retardants – may not be used as flame retardants in plastics • Cadmium • Chlorinated Hydrocarbons • Chlorinated Paraffins • Formaldehyde • Halogenated Diphenyl Methanes • Lead carbonates and sulfates • Lead and Lead compounds • Mercuric Oxide Batteries • Nickel – finishes must not be used on the external surface designed to be frequently handled or carried by the user. • Ozone Depleting Substances • Polybrominated Biphenyls (PBBs) • Polybrominated Biphenyl Ethers (PBBEs) • Polybrominated Biphenyl Oxides (PBBOs) • Polychlorinated Biphenyl (PCB) • Polychlorinated Terphenyls (PCT) • Polyvinyl Chloride (PVC) – except for wires and cables, and certain retail packaging has been voluntarily removed from most applications. • Radioactive Substances • Tributyl Tin (TBT), Triphenyl Tin (TPT), Tributyl Tin Oxide (TBTO)
	Packaging	<p>HP follows these guidelines to decrease the environmental impact of product packaging:</p> <ul style="list-style-type: none"> • Eliminate the use of heavy metals such as lead, chromium, mercury and cadmium in packaging materials. • Eliminate the use of ozone-depleting substances (ODS) in packaging materials. • Design packaging materials for ease of disassembly. • Maximize the use of post-consumer recycled content materials in packaging materials. • Use readily recyclable packaging materials such as paper and corrugated materials. • Reduce size and weight of packages to improve transportation fuel efficiency. • Plastic packaging materials are marked according to ISO 11469 and DIN 6120 standards.
	End-of-life Management and Recycling	<p>Hewlett-Packard offers end-of-life HP product return and recycling programs in many geographic areas. To recycle your product, please go to: http://www.hp.com/go/reuse-recycle or contact your nearest HP sales office. Products returned to HP will be recycled, recovered or disposed of in a responsible manner.</p>

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		<p>The EU WEEE directive (2002/95/EC) requires manufacturers to provide treatment information for each product type for use by treatment facilities. This information (product disassembly instructions) is posted on the Hewlett Packard web site at: http://www.hp.com/go/recyclers. These instructions may be used by recyclers and other WEEE treatment facilities as well as HP OEM customers who integrate and re-sell HP equipment.</p>
	HP, Inc. Corporate Environmental Information	<p>For more information about HP's commitment to the environment:</p> <p>Global Citizenship Report http://www.hp.com/hpinfo/globalcitizenship/gcreport/index.html</p> <p>Eco-label certifications http://www.hp.com/hpinfo/globalcitizenship/environment/productdesign/ecolabels.html</p> <p>ISO 14001 certificates: http://h20195.www2.hp.com/V2/GetDocument.aspx?docname=c04755842 and http://www.hp.com/hpinfo/globalcitizenship/environment/pdf/cert.pdf</p>

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