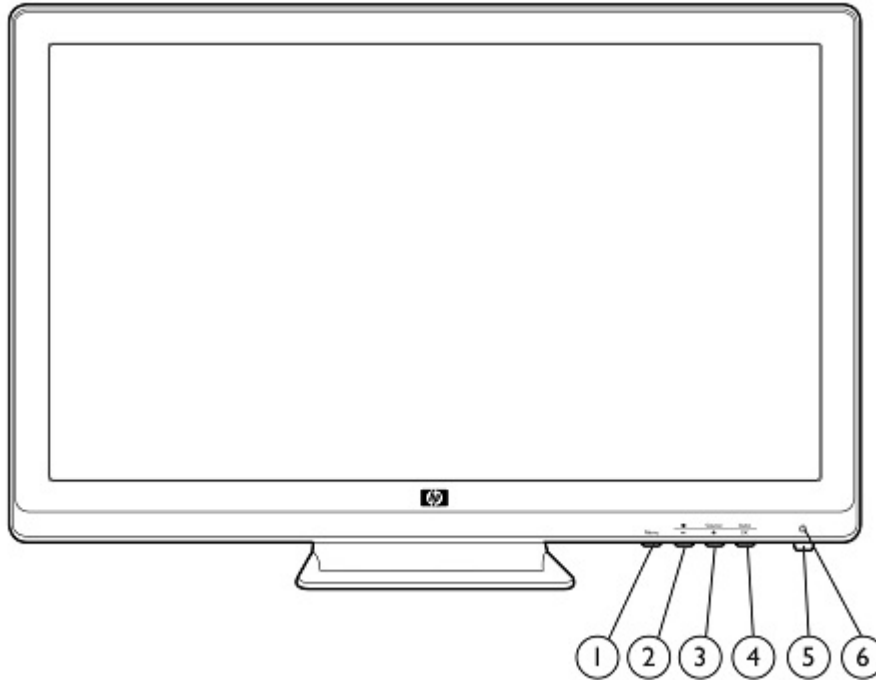


Overview



- | | | | |
|------------------------|--|---------------------|---|
| 1. Menu | Opens, selects or exits the OSD menu. | 4. Auto/OK | If the OSD menu is inactive, press to activate the auto adjustment feature to optimize the screen image. If the OSD menu is on, press to select the highlighted menu item |
| 2. Volume/Minus | If the OSD menu is inactive, press to open the Volume adjustment OSD sub-menu. If the OSD menu is on, press to navigate down through the OSD menu and decrease adjustment levels. | 5. Power | Turns the monitor on or off as long as the master power switch on the rear panel is on. |
| 3. Source/Plus | If the OSD menu is inactive, press to activate the source button that chooses the video signal input. If the OSD menu is on, press to navigate up through the OSD menu and increase adjustment levels. | 6. Power LED | AquaWhite = Fully powered.
Amber = Sleep mode.
Flashing Amber = Sleep Timer mode. |

Model
WT316AA



Technical Specifications

Panel	Type	23-inch Wide-Aspect Active Matrix TFT (thin film transistor)	
	Viewable Image Area (diagonal)	58,42 cm (23.0 in.) widescreen; diagonally measured	
	Screen Opening (W x H)	51,13 x 28,84 cm (20.1 x 11.4 in.) (bezel opening) 50,92 x 28,64 cm (20.05 x 11.28 in.) (panel active area)	
	Panel Type	TN with CCFL back-lit LCD with BrightView	
	Aspect Ratio	16:9	
	Viewing Angle (typical)	Up to 160° horizontal/160° vertical	
	Brightness (typical)*	275 nits (cd/m ²), includes loss for touch screen glass	
	Contrast Ratio (typical)*	1,000:1	
	Dynamic Contrast Ratio (typical)*	40,000:1	
	Response Time (typical)*	5 ms (on/off), 3 ms (gray to gray)	
	Pixel Pitch	0.2655 mm	
	Pixels Per Inch	95.7	
	Backlight Lamp Life (to half brightness)	50,000 hours	
	Color Gamut	72% typical	
	<i>*All performance specifications represent the typical specifications provided by HP's component manufacturers; actual performance may vary either higher or lower.</i>		
	On Screen Display (OSD) Controls	Buttons or Switches	Menu, Volume/- , Source/+ , Auto/OK , Power
Audio Controls		Yes (via OSD and Hot-Button)	
Languages		English, Spanish, French, Italian, German, Dutch, Brazilian Portuguese, Simplified Chinese, Traditional Chinese, Japanese	
User Controls		Brightness, contrast, color selection, user modes, clock, clock phase, H/V position, aspect ratio setting, sharpness, overdrive, OSD controls, management features, language selection, input selection, information and factory reset.	
Signal Interface/ Performance	Horizontal Frequency	24 to 94 kHz	
	Vertical Frequency	50 to 76 Hz	
	Native Resolution	1920 X 1080 @ 60 Hz	
	Preset VESA Graphic Modes (non-interlaced)	1920 X 1080 @ 60 Hz	
		1680 X 1050 @ 60 Hz	
		1600 X 1200 @60 Hz	
		1440 X 900 @ 60 Hz	
		1280 X 1024 @ 60 Hz	
		1280 X 960 @ 60 Hz	
		1280 X 720 Hz @ 60 Hz	
		1024 X 768 @ 60 Hz	
800 X 600 @ 60 Hz			
720 X 400 @ 70 Hz			
640 X 480 @ 60 Hz			
Text Mode	720 x 400 @ 70 Hz		



Technical Specifications

	Maximum Pixel Clock Speed	200 MHz (VGA); 170 MHz (DVI)		
	User Programmable Modes	Yes (20)		
	Anti-Glare	No		
	Anti-Static	No		
	Default Color Temperature	6500 K		
Touchscreen Specifications	Refresh Rate	120 frame/sec		
	Resolution	32727 x 32727		
	Accuracy	< ± 2.5mm; 95% coverage		
	Activation	Finger or Stylus; diameter ≥ 5mm		
	Power for optical module	< 1.0W (operation mode) < 60mW (suspend mode)		
	Multi-touch	2 points plus gesture (only supported in Windows® 7)		
	Interface	USB HID multi-touch digitizer		
	NOTE: Full touch functionality supported with Windows® 7. Limited touch functionality supported with Windows® Vista when HP 2310ti monitor is used as primary monitor. No touch functionality when used as a secondary monitor.			
Video/Other Inputs	Plug and Play	Yes		
	Input Connectors	(1) VGA, (1) DVI-D w/HDCP		
	Input Impedance	75 Ohms (VGA); 100-Ohms differential (DVI)		
	Sync Input	TTL separate synch		
	Video Cable	One DVI-D to DVI-D		
	Video Cable Lengths	1,8 m (5.9 ft.)		
	Audio	Integrated speakers (2 watts per channel) with 3.5mm stereo mini-plug input		
	Audio Cable	3.5mm stereo mini-plug cable		
	Audio Cable Length	1,8 m (5.9 ft.)		
Power	Input Power	90 - 265VAC, 45 - 63 Hz		
	Typical Power Consumption	47 W		
	Maximum	56 W		
	Power Saving	< 2 W		
	Power Cable Length	1,9 m (6.2 ft.)		
Mechanical	Dimensions (H x W x D)	Unpacked w/stand	38,9 x 57,3 x 19,9 cm (15.3 x 22.6 x 7.8 in.)	
		Unpacked w/o stand (head only)	35,9 x 57,3 x 8,49 cm (14.1 x 22.6 x 3.34 in.)	
		Packaged	26,3 x 65,0 x 45,2 cm (10.4 x 25.6 x 17.8 in.)	
	Weight	Head Only	6,1 kg (13.45 lb)	
		Unpacked	8,2 kg (18.0 lb)	
		Packaged	11,0 kg (24,2 lb)	
	Tilt Range	-5° to +55°		



Technical Specifications

	Swivel Range	No		
	Height Adjustable	No		
	Pivot Rotation	No		
	Base	Attachable, ships attached.		
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 (16,404 ft)		
	Altitude - Non-operating	0 to 12,192 m (40,000 ft)		
	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 		
	Energy Consumption (in accordance with US Energy Star test method)	115VAC, 60Hz	230VAC, 50Hz	100VAC, 60Hz
	Normal Operation	34.8W	34.6W	35.1W
	Sleep	0.55W	0.55W	0.55W
	Off	0.49W	0.50W	0.49W
	Heat Dissipation*	115VAC, 60Hz	230VAC, 50Hz	100VAC, 60Hz
	Normal Operation	119 BTU/hr	118 BTU/hr	120 BTU/hr
	Sleep	2 BTU/hr	2 BTU/hr	2 BTU/hr
	Off	2 BTU/hr	2 BTU/hr	2 BTU/hr
		* 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). 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 95.1% recycle-able when properly disposed of at end of life. 		
	Packaging Materials	External:	Paper / Cardboard	1275 g
		Internal:	EPS (Expanded Polystyrene)	456 g
			Polyethylene high density	34 g
	RoHS Compliance	Hewlett-Packard 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		



Technical Specifications

Material Usage

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 recognized that there is no technically feasible alternative (as indicated by an exemption under the EU RoHS Directive).

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/supplychain/gen_specifications.html):

- 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

HP follows these guidelines to decrease the environmental impact of product packaging:

- 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 Hewlett-Packard offers end-of-life HP product return and recycling programs



Technical Specifications

and Recycling 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.

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.

Hewlett-Packard Corporate Environmental Information For more information about HP's commitment to the environment:

Global Citizenship Report

<http://www.hp.com/hpinfo/globalcitizenship/gcreport/index.html>

Eco-label certifications

<http://www.hp.com/hpinfo/globalcitizenship/environment/productdesign/ecolabels.html>

ISO 14001 certificates:

<http://www.hp.com/hpinfo/globalcitizenship/environment/operations/envmanagement.html>

Options

HP LCD Monitor Quick Release-Part number EM870AA* 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. For more information, refer to this product's QuickSpecs document.

* The HP Quick Release has been designed to support a maximum of up to 24 lbs (10.9 kg) for all devices mounted. Because mounting surfaces vary widely and the final mounting method and configuration may vary, mounting fasteners are not supplied (other than the VESA-compliant screws). HP recommends that you consult with a qualified engineering, architectural or construction professional to determine the appropriate type and quantity of mounting fasteners required for your application and to ensure that your mounting solution is properly installed to support applied loads.

HP USB Graphics Adapter-Part number NL571AA Enables connection of up to six simultaneous displays to help you boost productivity and multi-task across several open applications. Use one Adapter to bridge between a notebook or desktop PC and second monitor or use multiple Adapters to connect several displays to each other.

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.

Other

Accessories Included DVI-D cable, AC power cable, audio cable, USB cable*
*USB is pass through from Human Interface Device (HID) to PC only, no USB hub is present.

Software No

User Guide Languages English, Danish, Dutch, Finnish, French, German, Hebrew, Italian, Norwegian, Spanish, Swedish, Czech, Greek, Polish, Russian, Slovak, Turkish, Arabic, Portuguese (Brazilian), Portuguese (Portugal), Bahasa Indonesia, S. Chinese, T. Chinese, Korean, Japanese

Warranty Languages English, German, French, Danish, Norwegian, Swedish, Turkish, Arabic, Dutch, Finnish

Color Black



Technical Specifications

	VESA External Mounting	Yes (one set of standard 4-hole pattern, 100 mm). Use of the top VESA 4-hole pattern will allow the user to set monitor head lower to the desk surface.
	Security Lock-Ready	Yes
Certification and Compliance		CE, ETL, FCC, C-Tick, VCCI, BSMI, CB, TUV-BAUART, TUV-S, ISO9241-307, CCC, CEL, CSC, Microsoft® Windows® XP, Windows Vista®, Windows® 7
Compatibility		Compatible with platforms using the VESA standard video modes. Recommended for use with HP products.
Service and Warranty		Protected by HP, including a 1 year parts and 1 year labor (1/1/0) standard limited warranty. Certain restrictions and exclusions apply.** ** HP Care Pack Services extend service contracts beyond the standard warranties. Service levels and response times for HP Care Packs may vary depending on your geographic location. Service starts from date of hardware purchase. To choose the right level of service for your HP product, use the HP Care Pack Services Lookup Tool at: http://www.hp.com/go/lookuptool. Additional HP Care Pack Services information by product is available at: http://www.hp.com/hps/carepack.

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