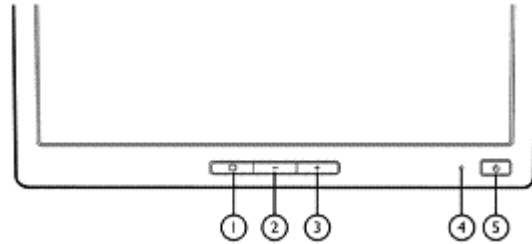
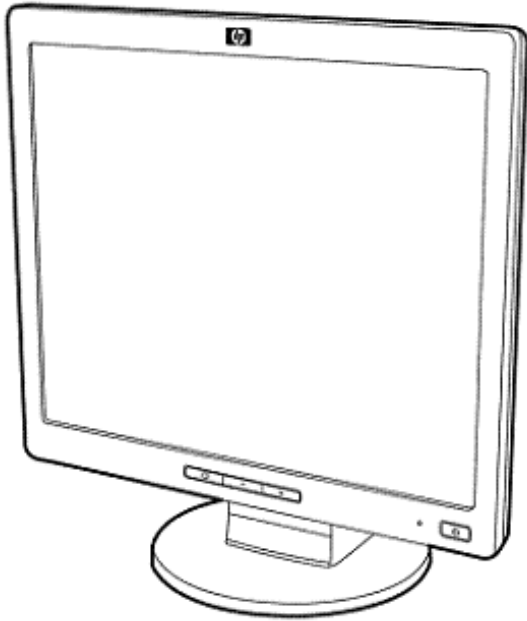


## Overview



1. Button 1: Menu selection
2. Button 2: Menu "-" selector button
3. Button 3: Menu "+" selector button
4. Button 4: Power LED
5. Button 5: Power button

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## Model

GL831AA

### Technical Specifications

Panel	Type	15-inch Active Matrix TFT (thin film transistor)	
	Viewable Image Area (diagonal)	15 in (38.1 cm)	
	Screen Opening (W x H)	12.0 x 9.0 in (30.6 x 23.0 cm)	
	Viewing Angle (typical)*	90 degrees horizontal/50 degrees vertical (10:1 minimum contrast ratio)	
	Brightness (typical)*	170 nits (cd/m <sup>2</sup> )	
	Contrast Ratio (typical)*	550:1	
	Pixel Pitch	0.297 mm	
	Response Rate	8 ms	
* All performance specifications represent the typical specifications provided by HP's component manufacturers; actual performance may vary either higher or lower.			
On Screen Display (OSD) Controls	Buttons or Switches	3-button OSD (menu, minus, plus); power on/off	
	Languages	English, French, German, Spanish, Italian, Dutch, Simplified Chinese	
	User Controls	Image Control (auto, horizontal, vertical)	
		Positioning (vertical and horizontal)	
		Color Temperature (6500k, 9300k, Custom)	
		Brightness	
		Contrast	
Clock, Clock Phase			
Monitor Management (power saver, sleep)			
Signal Interface/Performance	Horizontal Frequency	30 to 63 kHz	
	Vertical Frequency	50 to 76 Hz	
	Graphics Controller	Genesis, MStar, Realtec	
	Native Resolution	1024 x 768 @ 60 Hz (recommended)	
	Maximum Resolution (Digital)	N/A	
	Preset VESA Graphic Modes (non-interlaced)	1024 x 768 @ 60 Hz, 70 Hz, and 75 Hz	
		832 x 624 @ 75 Hz (Mac)	
		800 x 600 @ 60 Hz, 72 Hz, and 75 Hz	
		720 x 400 @ 70 Hz	
		640 x 480 @ 60 Hz, 72 Hz, and 75 Hz	
	Maximum Pixel Clock Speed	80 MHz	
	User Programmable Modes	Yes, 10	
	Anti-Glare	Yes	
Anti-Static	Yes		
Default Color Temperature	6500 degrees Kelvin		
Video Input	Plug and Play	Yes	

### Technical Specifications

	<b>Input Signal</b>	15 pin D-sub (Analog VGA)			
	<b>Input Impedance</b>	75 ohms (2 % value change allowed)			
	<b>Sync Input</b>	TTL separate synch			
	<b>Video Cable</b>	Detachable 15-pin D-sub mini connector			
	<b>Video Cable Length</b>	70.8 in (1.8 m)			
<b>Power</b>	<b>Input Voltage</b>	100 ~ 240 VAC			
	<b>Nominal Current</b>	< 0.50 Ampere			
	<b>Frequency</b>	50 ~ 60 Hz			
	<b>Typical Power Consumption</b>	21 watts			
	<b>Maximum</b>	< 23 watts			
	<b>Power Saving</b>	< 2 watts			
	<b>Power Cable Length</b>	74.8 in (1.9 m); detachable			
	<b>Mechanical</b>	<b>Dimensions (H x W x D)</b>	<b>Unpacked with stand</b>	13.9 x 13.4 x 7.9 in (35.5 x 34.0 x 20.3 cm)	
			<b>Display Head only</b>	11.4 x 13.4 x 2.4 in (29.0 x 34.0 x 6.0 cm)	
<b>Packaged</b>			15.6 x 15.6 x 5.9 in (39.5 x 39.5 x 15.0 cm)		
<b>Weight</b>		<b>Unpacked</b>	7.05 lb (3.2 kg)		
		<b>Packaged</b>	9.92 lb (4.5 kg)		
<b>Tilt Range</b>		-5 to +30 degrees vertical tilt			
<b>Swivel Range</b>		None			
<b>Height Adjustable</b>		No			
<b>Pivot Rotation</b>		No			
<b>Base and Stand</b>		Detachable			
<b>Environmental</b>	<b>Temperature – Operating</b>	50° to 95° F (10° to 35° C) non-condensing			
	<b>Temperature – Non-operating</b>	-4° to 140° F (-20° to 60° C)			
	<b>Humidity – Operating</b>	20% to 80% non-condensing			
	<b>Humidity – Non-operating</b>	5% to 90%			
	<b>Altitude – Operating</b>	0 to 12,000 ft (0 to 3,658 m)			
	<b>Altitude – Non-operating</b>	0 to 40,000 ft (0 to 12,100 m)			
<b>Environmental Data</b>	<b>Eco-Label Certifications and Declarations</b>	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"> <li>● ENERGY STAR® qualified</li> <li>● IT ECO declaration</li> <li>● TCO 03</li> <li>● GEEA</li> </ul>			
	<b>Energy Consumption</b> (in accordance with ENERGY STAR® test method)	AC Input Voltage at 100 VAC +/- 5 VAC, 50 Hz +/- 3 Hz	AC Input Voltage at 115 VAC +/- 5 VAC, 60 Hz +/- 3 Hz	AC Input Voltage at 230 VAC +/- 5 VAC, 50 Hz +/- 3 Hz	

### Technical Specifications

Normal Operation	16.5 watts	16.6 watts	16.3 watts
Sleep	1.53 watts	1.34 watts	1.40 watts
Off	0.64 watts	0.44 watts	0.46 watts
Heat Dissipation*	100 VAC, 50 Hz	115 VAC, 60 Hz	230 VAC, 50 Hz
Normal Operation	56.43 BTU/hr	56.78 BTU/hr	55.75 BTU/hr
Sleep	5.23 BTU/hr	4.58 BTU/hr	4.79 BTU/hr
Off	2.18 BTU/hr	1.27 BTU/hr	1.57 BTU/hr

\* Heat dissipation is calculated based on the measured watts, assuming the service level is attained for one hour.

**Additional Information** 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.

Plastics parts weighing over 25 grams used in the product are marked per ISO 11469 and ISO1043.

Display meets the requirement for low frequency electromagnetic fields per TCO and prEN50279 A/B/C.

#### Packaging Materials

- Corrugated Carton – 0.550 kg
- Bag LDPE – 0.025 kg
- Film PP – 0.150 kg

#### Material Usage

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 [www.hp.com/hpinfo/globalcitizenship/environment/supplychain/gen\\_specifications.html](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)

### Technical Specifications

- 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 and Recycling

Hewlett-Packard offers end-of-life HP product return and recycling programs in many geographic areas. To recycle your product, please go to: [www.hp.com/recycle](http://www.hp.com/recycle) or contact your nearest HP sales office. Products returned to HP will be recycled, recovered or disposed of in a responsible manner.

#### Hewlett-Packard Corporate Environmental Information

For more information about HP's commitment to the environment: Global Citizenship Report  
[www.hp.com/hpinfo/globalcitizenship/gcreport/index.html](http://www.hp.com/hpinfo/globalcitizenship/gcreport/index.html)  
Eco-label certifications  
[www.hp.com/hpinfo/globalcitizenship/environment/productdesign/ecolabels.html](http://www.hp.com/hpinfo/globalcitizenship/environment/productdesign/ecolabels.html)  
ISO 14001 certificates:  
[www.hp.com/hpinfo/globalcitizenship/environment/operations/envmanagement.html](http://www.hp.com/hpinfo/globalcitizenship/environment/operations/envmanagement.html)

#### Options

##### HP LCD Speaker Bar – Part number: EE418AA

Powered directly by the monitor or PC, the Speaker Bar seamlessly attaches to the monitor's lower bezel to bring full audio support to select HP LCD monitors. Features include dual speakers with full sound range and an external jack for headphones. Sold separately. For more information, refer to the product's QuickSpecs.

##### HP LCD Monitor Quick Release – Part number EM870AA\*

Easy-to-use, VESA-compliant, LCD monitor mounting solution that allows quick and secure attachment of an LCD monitor to a variety of stands, brackets, arms or wall mounts. For more information, refer to the product's QuickSpecs.

\* The HP LCD Monitor Quick Release has been designed to support a maximum of up to 24 lbs (10.9 kg) depending upon the mounting configuration used. 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

### Technical Specifications

for your application and to ensure that your mounting solution is properly installed to support applied loads.

<b>Other</b>	<b>Accessories Included</b>	Detachable VGA cable, detachable AC power cord, documentation kit, and user CD.	
	<b>Software</b>	HP Display LiteSaver feature allows you to schedule Sleep mode at preset times to help protect the monitor against image retention, drastically lower power consumption and energy costs, and extend the lifespan of the monitor.	
	<b>User Guide Languages</b>	English, Brazilian Portuguese, French, LA Spanish, Korean, Simplified Chinese, Traditional Chinese, Japanese, Danish, Dutch, Finnish, German, Italian, Norwegian, Swedish, Greek, Polish, Russian, Slovenian, Turkish	
	<b>Warranty Languages</b>	<b>Americas</b>	English, Canadian French
		<b>LA</b>	Spanish, Brazilian Portuguese
		<b>EMEA</b>	English, Danish, Dutch, Finnish, European French, German, Italian, Norwegian, Castilian Spanish, Swedish
		<b>Asia/Pacific</b>	English, Bahasa, S. Chinese, T. Chinese, Korean, Japanese, Chinese
<b>Color</b>	Carbonite/Silver		
<b>VESA External Mounting</b>	Yes (Standard 4 hole pattern, 100 mm)		
<b>Kensington Lock-ready</b>	Yes		
<b>Certification and Compliance</b>	ISO 13406-2 pixel defect guidelines, CISPR, VCCI, CSA (Canada), ACA (Australia), TUV and GS Mark (German ergonomic), BSMI (Taiwan), CCC (China), MIC (South Korea), NOM (Mexico), Eastern European approvals, CE Marking, FCC approval, ENERGY STAR® qualified, Microsoft® Windows® certified (Microsoft® Windows® 2000 and Microsoft Windows XP), UL listed, GOST (Russia), SASO (Saudi Arabia)		
<b>Compatibility</b>	Compatible with platforms using the VESA standard video modes. Recommended for use with HP products.		
<b>Service and Warranty</b>	One year parts, labor, and on-site service. 24-hour, 90-day, toll-free technical support. Replacement options may include second business day on-site service, or next business day direct replacement, at HP's sole discretion.* With direct replacement, HP will ship a replacement display product directly to you. Using the prepaid shipping labels provided, return your failed display to HP in the same packaging as the replacement. Certain restrictions and exclusions apply. For details see your product warranty or contact HP Customer Support.		
	* Service levels and response times for HP Care Packs may vary depending on your geographic location. Restrictions and limitations apply. For details, visit <a href="http://www.hp.com/go/carepack">www.hp.com/go/carepack</a> .		

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