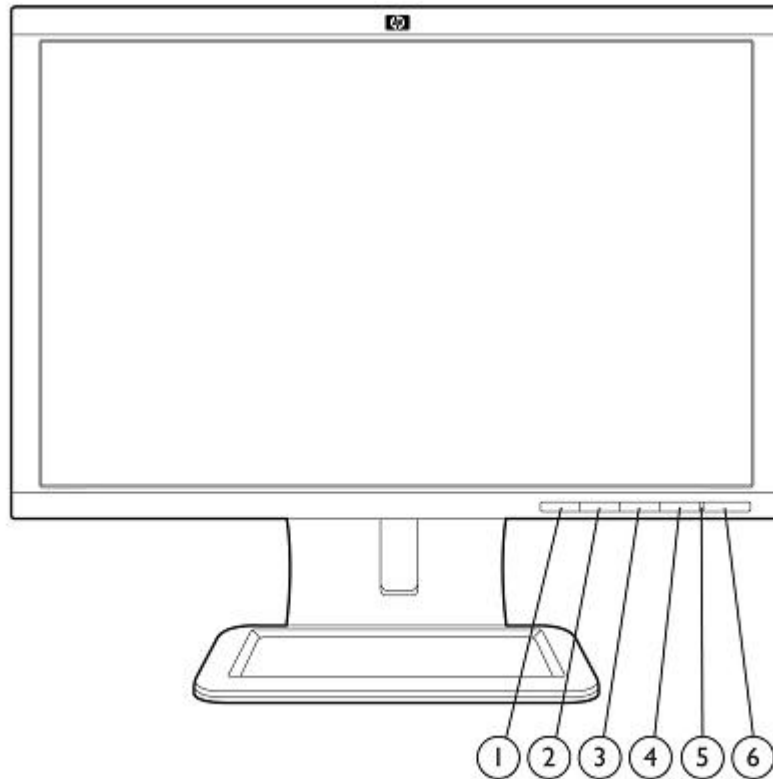## Overview

1. **Menu/select**: Opens, selects or exits the OSD menu.

2. **"-"**: If the OSD menu is on, press to navigate backward through the OSD menu and decrease adjustment levels.

3. **"+"/source**: Select input source. If the OSD menu is on, press to navigate forward through the OSD menu and increase adjustment levels.

4. **OK/auto**: If the OSD menu is on, press to select the highlighted menu item. If the OSD menu is inactive, press to activate the auto adjustment feature to optimize the screen image.

5. **Power LED**: fully powered = green; sleep mode = amber; sleep timer mode = flashing amber.

6. **Power**: Turns the monitor on or off.

Part Number

Model: NM274AA#ABA
   NM274A2#ABA (TAA Compliant)

Technical Specifications

Panel	**Type**	22-inch Wide-Aspect Active Matrix TFT (thin film transistor)
	Viewable Image Area	22 in (55.9 cm) widescreen; diagonally measured
	Screen Opening (W x H)	18.8 x 11.8 in (47.8 x 30.0 cm)
	Panel Type	TN
	Aspect Ratio	16:10
	Viewing Angle (typical)	Up to 160° horizontal/160° vertical (10:1 minimum contrast ratio)
	Brightness (typical)*	250 nits (cd/m^2)
	Contrast Ratio (typical)*	1000:1
	Dynamic Contrast Ratio (typical)*	3000:1
	Response Rate (typical)*	5 ms (on/off)
	Pixel Pitch	0.282 mm
	Backlight Lamp Life (to half brightness)	50K hours
	Color Gamut	72% color gamut (NTSC,TYP)
	*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**	OSD menu, OSD up, Source select/OSD down, Auto adjust/OK, Power. (from left to right)
	Languages	English, French, German, Spanish, Italian, Dutch, and Japanese, S. Chinese, T.Chinese, Brazilian Portuguese
	User Controls	Brightness, contrast, positioning, color temperature (6500k, 9300k, custom), individual color control, serial number, display, clock, clock phase, monitor management, factory reset
Signal Interface/ Performance	**Horizontal Frequency**	24 to 83 kHz
	Vertical Frequency	50 to 76 Hz
	Native Resolution	1680 x 1050 @ 60 Hz (WSXGA+), 1.76 Million pixels
	Preset VESA Graphic Modes (non-interlaced)	1680 x 1050 @ 60 Hz
		1600 x 1200 @ 60 Hz
		1600 x 1000 @ 60 Hz
		1440 x 900 @ 60 Hz
		1280 x 1024 @ 60 Hz
		1280 x 960 @ 60 Hz
		1024 x 768 @ 60 Hz
		800 x 600 @ 60 Hz
		640 x 480 @ 60 Hz
	Text Mode	720 x 400 @ 70 Hz
	Mac Mode	Not supported
	Sun Mode	Not supported

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	Maximum Pixel Clock Speed	165 MHz (analog input); 165 MHz (DVI input), 230 Mhz (DisplayPort)	
	User Programmable Modes	Yes, 20	
	Anti-Glare	Yes	
	Anti-Static	Yes	
	Default Color Temperature	6500 K	
Video/Other Inputs	**Plug and Play**	Yes	
	Self Powered USB 2.0 Hub	One upstream, two downstream ports (cable included)	
	Input Connectors	VGA, DVI-D, and DisplayPort connectors; HDCP support	
	Input Impedance	75 ohms ± 10%	
	Sync Input	TTL separate synch	
	Video Cable	One DVI-D to DVI-D and one 15-pin D-sub (VGA)	
	Video Cable Lengths	VGA 5.9 ft (1.8 m), DVI-D 5.9 ft (1.8 m)	
Power	**Input Power**	Auto-Sensing, (100 to 240 VAC)+/-10%	
	Frequency	47 to 63 Hz	
	Typical Power Consumption	25 watts (without speaker/with 25% USB)	
	Maximum	33 watts	
	Power Saving	< 1 watts standby; < 0.5 watt off	
	Power Cable Length	6.2 ft (1.9 m)	
Mechanical	**Dimensions** (H x W x D)	**Unpacked w/stand**	14.7 to 17.8 x 20.13 x 10.04 in (37.35 to 45.22 x 51.12 x 25.49 cm)
		Unpacked w/o stand (head only)	13.13 x 20.13 x 2.44 in (33.35 x 51.12 x 6.2 cm)
		Packaged	23.27 x 19.37 x 9.09 in (59.1 x 49.2 x 23.1 cm)
	Weight	**Head Only**	9.37 lb (4.25 kg)
		Unpacked	15.04 lb (6.82 kg)
		Packaged	24.92 lb (11.3 kg)
	Tilt Range	-5° to + 30° vertical	
	Swivel Range	-170° to + 170°	
	Height Adjustable	Yes, up to 4.72 in (12.0 cm)	
	Pivot Rotation	Yes	
	Base	Attachable, ships attached	
Environmental	**Temperature – Operating**	41° to 95° F (5° to 35° C)	
	Temperature – Non-operating	-29° to 140° F (-20° to 60° C)	
	Humidity – Operating	20% to 80% non-condensing	
	Humidity – Non-operating	5% to 95%, 38.7° C max wet-bulb	

Technical Specifications

	Altitude – Operating	0 to 16,404 ft (0 to 5, 000 m)		
	Altitude – Non-operating	0 to 40,000 ft (0 to 12,192 m)		
Environmental Data	**Eco-Label Certifications and 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:		

- IT ECO declaration
- TCO '03

Energy Consumption	115VAC, 60 Hz	230VAC, 50 Hz	100VAC, 60 Hz
Normal Operation	21.13 W	21.39 W	21.34 W
Sleep	0.56 W	0.52 W	0.56 W
Off	0.45 W	0.43 W	0.48 W

Heat Dissipation*	115VAC, 60 Hz	230VAC, 50 Hz	100VAC, 60 Hz
Normal Operation	72 BTU/hr	73 BTU/hr	73 BTU/hr
Sleep	2 BTU/hr	2 BTU/hr	2 BTU/hr
Off	2 BTU/hr	1 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

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.

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

This product contains 12.8% recycled materials (by wt.)

This product is 93.4% recyclable when properly disposed of at end of life.

External:

- Paper / Cardboard 3062 g
- Polyethylene high density 24 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 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

Technical Specifications

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

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):
- 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 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:

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		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 www.hp.com/hpinfo/globalcitizenship/gcreport/index.html Eco-label certifications www.hp.com/hpinfo/globalcitizenship/environment/productdesign/ecolabels.html ISO 14001 certificates: www.hp.com/hpinfo/globalcitizenship/environment/operations/envmanagement.html
Options	**HP LCD Speaker Bar—Part number NQ576AA**	Powered directly by the connected 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 dual external headphone jacks. Sold separately. For more information, refer to the product's QuickSpecs.
	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 a flat panel monitor to a variety of stands, brackets, arms or wall mounts. For more information, refer to this product's QuickSpecs document.
	HP Integrated Work Center Stand-Part number LH526AA	Allows mounting of a 17 - 24 inch (43.18- to 60.96 cm) diagonal HP LCD monitor and an HP Compaq 8000 series Ultra-slim Desktop PC as well as select HP Thin Clients on a single stand for the convenience of an "all-in-one" form factor. For more information, refer to this product's QuickSpecs document.
	HP Integrated Work Center for Small Form Factor—Part number QK549AT	Allows mounting of a 17- to 24-inch (43.18 to 60.96 cm) diagonal HP LCD monitor with an HP Compaq Small Form Factor Desktop PC. This compact system configuration saves you valuable desktop room to make the most of a space-constrained office environment.
	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.
	DisplayPort Cable Kit—Part number VN567AA	Allows digital connectivity to the monitors DisplayPort video input and the PC's DisplayPort video connector.

* The HP Quick Release has been designed to support a maximum of up to 24 lbs (10.9 kg) depending upon

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the mounting configuration used. Please note this is a total weight limit for all devices mounted, i.e. the combined weight of the monitor and a second device such an HP Compaq Thin Client cannot exceed 24 pounds. 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.

Other	**Accessories Included**	VGA cable, DVI-D to DVI-D cable, USB cable, power cable, user CD-ROM
	Software	HP Display Assistant is a software utility that enables theft deterrence and allows monitor adjustment, color calibration, and security/asset management using the Display Data Channel Command Interface (DDC/CI) protocol of the connected PC.
		HP Display LiteSaver 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.
		Pivot Pro software from Portrait Displays, Inc. interacts with your PC's native graphics driver to enable seamless portrait screen redraws with a simple mouse-click or keyboard command. Pivot Pro supports 90-degree portrait and landscape views. Language support is available in English, Japanese, French, German, Spanish, Italian, and Traditional and Simplified Chinese.
	User Guide Languages	English, B. Portuguese, French, LA Spanish, Korean, S. Chinese, T. Chinese, Bahasa, Japanese, Danish, Finnish, German, Norwegian, Spanish, Swedish, Greek, Polish, Russian, Slovenian, Turkish
	Warranty Languages	English, Canadian French, LA Spanish, Brazilian Portuguese, Danish, German, Castilian Spanish, French, Italian, Dutch, Norwegian, Finnish, Swedish, Bahasa Indonesian, Korean, T. Chinese, S. Chinese
	Bezel Color	Brushed Aluminum and Black
	VESA External Mounting	Yes (one set of standard 4-hole pattern, 100 mm).
	Security Lock-Ready	Yes, one slot available
Certification and Compliance		TCO5 (Low Emissions), ISO 9241-307, CISPR Requirements, VCCI Approvals, KC and KCC (Korean) Requirements, CSA 60950-1, UL 60950-1, EN55022 Class B, CNS 13438 Class B, IEC 60950-1, China Energy Label (CEL), China MEPS, Korea MEPS (pending, Energy Boy), SmartWay - NA only - Energy logistics, EUP Lot 6 Tier 1 AS/NZS 3548 Class B Approval, "GS" Mark, TUV Approvals, GEEA, CE Marking, FCC Part 15 class B Approval, EN55024 Class B, EN60950 -1, CUL, CCIB, CCEE, IT ECO (EDS)
Compatibility		Compatible with platforms using the VESA standard video modes. Recommended for use with HP products.
Service and Warranty		Three years 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.
		* HP Care Pack Services extend service contracts beyond the standard warranties. 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: www.hp.com/go/lookuptool. Additional HP Care Pack Services information by product is available at: www.hp.com/hps/carepack. Service levels and response times for HP Care Packs may vary depending on your geographic location.

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