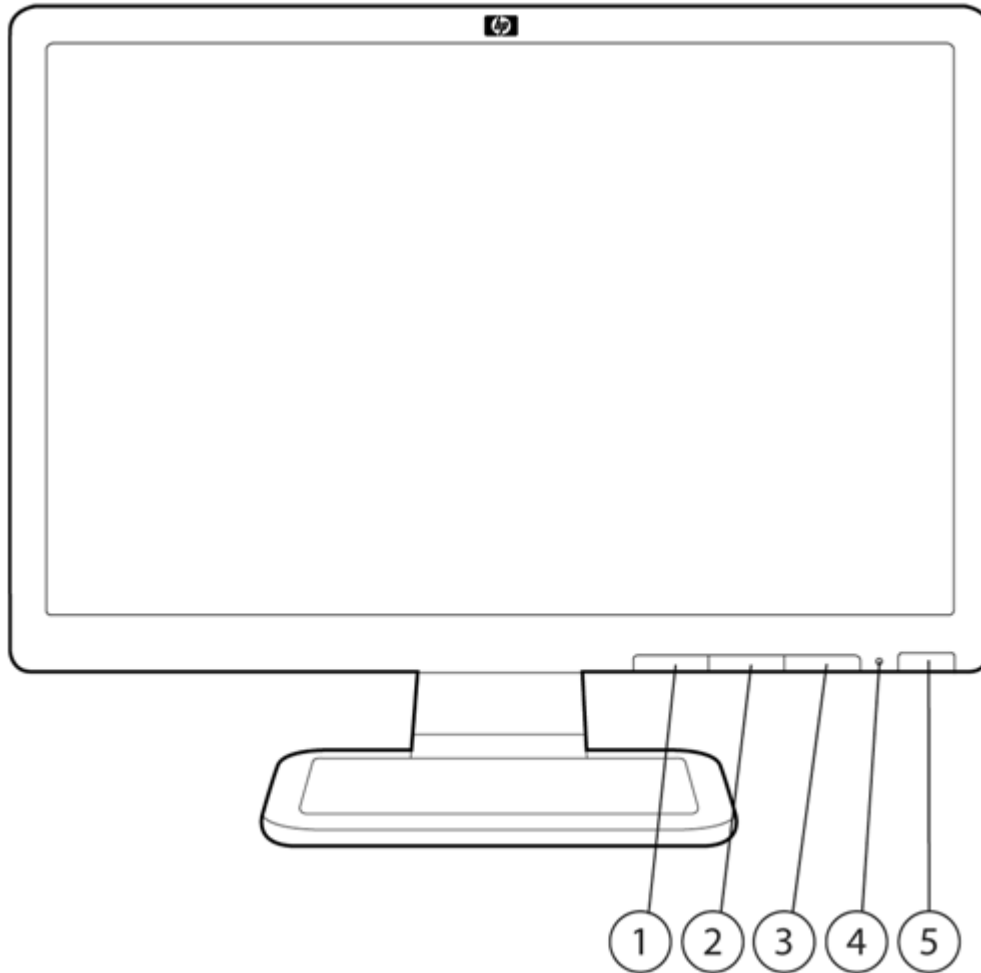


Overview



1. **Menu/select:** Opens, selects or exits the OSD menu.
2. **"-"/Auto:** Navigates backward through the OSD menu and decreases adjustment levels; when the OSD menu is inactive, activates the auto adjustment feature to optimize the screen image.
3. **"+":** Navigates forward through the OSD menu and increases adjustment levels; when the OSD menu is inactive, chooses the video input signal input, VGA or DVI.
4. **Power LED:** fully powered = green; sleep mode = amber; sleep timer mode = flashing amber.
5. **Power:** Turns the monitor on or off.

Model

NP446A

Technical Specifications

Panel	Type	19-in (48.14-cm) Wide-Aspect Active Matrix TFT (thin film transistor)
	Viewable Image Area (diagonal)	19 in (48.14 cm) wide (WXGA+); diagonally measured
	Screen Opening (W x H)	16.1 x 10.0 in (40.82 x 25.52 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
	Response Time (typical)*	≤5 ms (on/off)
	Pixel Pitch	.2835 mm
	Backlight Lamp Life (to half brightness)	50 K hours
	Color Gamut	72%
	<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	Auto adjust/OSD down, OSD UP, OSD menu select, power
	Languages	English, French, German, Spanish, Italian, Dutch, and Japanese, S. Chinese, Portuguese
	User Controls	Brightness, contrast, positioning, color temperature (6500k, 9300k, custom), individual color control, serial number, display, clock, clock phase, monitor management, factory reset, zoom
Signal Interface/ Performance	Horizontal Frequency	24 to 83 kHz
	Vertical Frequency	50 to 76 Hz
	Native Resolution	1440 x 900 @ 60 Hz
	Preset VESA Graphic Modes (non-interlaced)	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
	CVT Mode	1152 x 720 @ 60 Hz
		1280 x 768 @ 60 Hz
	Text Mode	720 x 400 @ 70 Hz
	Maximum Pixel Clock Speed	140 MHz (analog input)
	User Programmable Modes	Yes, 15
	Anti-Glare	Yes
	Anti-Static	No
Default Color Temperature	6500 K	
Video/Other Inputs	Plug and Play	Yes

Technical Specifications

	Self Powered USB 2.0 Hub	No
	Input Signal	VGA, DVI-D (cables included)
	Input Impedance	75 ohms ± 10%
	Sync Input	TTL separate synch or Composite Sync
	VGA Cable	15 pin D-sub VGA
	VGA Cable Length	5.9 ft (1.8 m)
Audio	Speakers	Integrated rear firing
	Output power	2 watt per channel
	Controls	Volume, OSD selectable
	Audio cable	Included, length: 5.9 ft (1.8 m)
Power	Input Power	Auto-Sensing, 90 to 265 VAC
	Frequency	45 to 63 Hz
	Typical Power Consumption	20 watts
	Maximum	23 watts
	Power Saving	< 2 watts standby; 1 watt off
	Power Cable Length	6.2 ft (1.9 m)
Mechanical	Dimensions (H x W x D)	Unpacked w/stand 14.6 x 17.6 x 8.1 in (37.0 x 44.6 x 20.6 cm)
		Unpacked w/o stand (head only) 11.9 x 17.6 x 2.3 in (30.1 x 44.6 x 5.9 cm)
		Packaged 17.6 x 20.2 x 5.2 in (44.5 x 51.3 x 13.2 cm)
	Weight	Unpacked 9.5 lb (4.3 kg)
		Head only 8.8 lb (4.0 kg)
		Packaged 12.6 lb (5.7 kg)
	Tilt Range	-5° to + 25° vertical
	Swivel Range	No
	Height Adjustable	No
	Pivot Rotation	No
	Base	Detachable, ships attached
Environmental	Temperature - Operating	-29° to 140° F (-34° to 60° C)
	Temperature - Non-operating	-4° 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
	Altitude - Operating	+0 to 16,404 ft (5000 m)
	Altitude - Non-operating	+40,000 ft (12,192 m)
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.

Technical Specifications

HP Integrated Work Center Stand—Part number: GN783AA	Allows mounting of select 17- to 22-inch diagonal HP LCD monitors and an HP Compaq dc7900 Ultra-slim Desktop PC or HP thin client on a single stand for the convenience of an "all-in-one" form factor. Sold separately. For more information, refer to this product's QuickSpecs document.
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.

* 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.

Other

Accessories Included	VGA cable - connects the graphic card's VGA connector to the monitor's VGA input, DVI cable - connects the graphic card's DVI-D connector to the monitor's DVI input
Software	HP Display Assistant is a software utility that allows monitor adjustment and color calibration 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.
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
Color	Black
VESA External Mounting	Yes, standard 4 hole pattern, 100 mm
Kensington Lock-Ready	Yes

Certification and Compliance

TCO 5.0 Displays, 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, ENERGY STAR® qualified, EN55024 Class B, EN60950 -1, CUL, CCIB, CCEE, IT ECO (EDS), EPEAT™ Silver

Compatibility

Compatible with platforms using the VESA standard video modes. Recommended for use with HP products.



Technical Specifications

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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