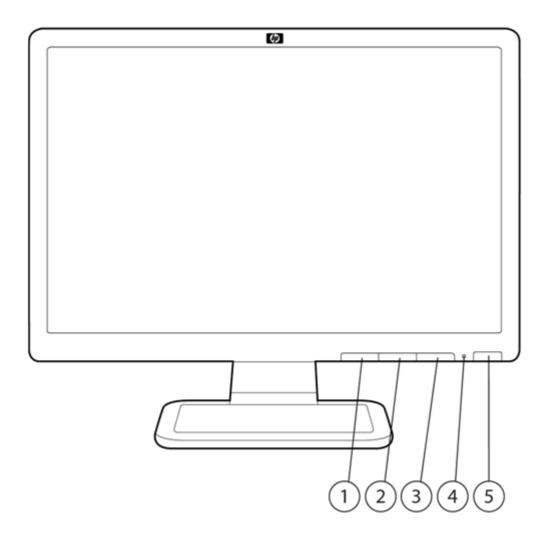
Overview



- 1. Menu/select: Opens, selects or exits the OSD menu.
- "-"/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.
- "+": 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

16.1 x 10.0 in (40.82 x 25.52 cm)

 $(W \times H)$ 

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<sup>2</sup>)

Contrast Ratio (typical)\* 1000:1

Response Time (typical)\* = 5 ms (on/off)

Pixel Pitch .2835 mm

Backlight Lamp Life 50 K hours

(to half brightness)

Color Gamut 72%

\*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 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 1280 x 1024 @ 60 Hz and 75 Hz

Modes (non-interlaced) 1280 x 960 @ 60 Hz

1024 x 768 @ 60 Hz and 75 Hz 800 x 600 @ 60 Hz and 75 Hz 640 x 480 @ 60 Hz and 75 Hz

**CVT Mode** 1152 x 720 @ 60 Hz

1280 x 768 @ 60 Hz

**Text Mode** 720 x 400 @ 70 Hz

Mac Mode 1152 x 870 @ 75 Hz and 832 x 624 @ 75 Hz

Sun Mode 1152 x 900 @ 66 Hz Maximum Pixel Clock 140 MHz (analog input)

Speed

User Programmable Yes, 15

Modes

Anti-Glare Yes Anti-Static No



#### Technical Specifications

Default Color 6500 K

Temperature

Video/Other Inputs Plug and Play Yes

Self Powered USB 2.0

Hub

Input Signal VGA, DVI-D (cables included)

No

Input Impedance 75 ohms  $\pm$  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)

Input Power Auto-Sensing, 90 to 265 VAC

Frequency 45 to 63 Hz Typical Power 22.8 watts

Consumption

Maximum 29.0 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** 11.9 x 17.6 x 2.3 in (30.1 x 44.6 x 5.9 cm)

(head only)

**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**  $-5^{\circ}$  to  $+25^{\circ}$  vertical

Swivel Range No Height Adjustable No Pivot Rotation No

Base Detachable, ships attached

Temperature - Operating -29° to 140° F (-34° to 60° C)

Temperature - Non- -4° to 140° F (-20° to 60° C)

operating

Humidity - Operating 20% to 80% non-condensing Humidity - Non-operating 5% to 95%, 38.7° C max wet-bulb

Altitude - Operating +12,000 ft (3,658 m)
Altitude - Non-operating +40,000 ft (12,192 m)

Options HP LCD Monitor Quick An easy-to-use, VESA-compliant, LCD monitor mounting solution that allows

Release—Part number 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

Environmental

Power

#### Technical Specifications

QuickSpecs document.

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.

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

Other

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.

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.



### Technical Specifications

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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