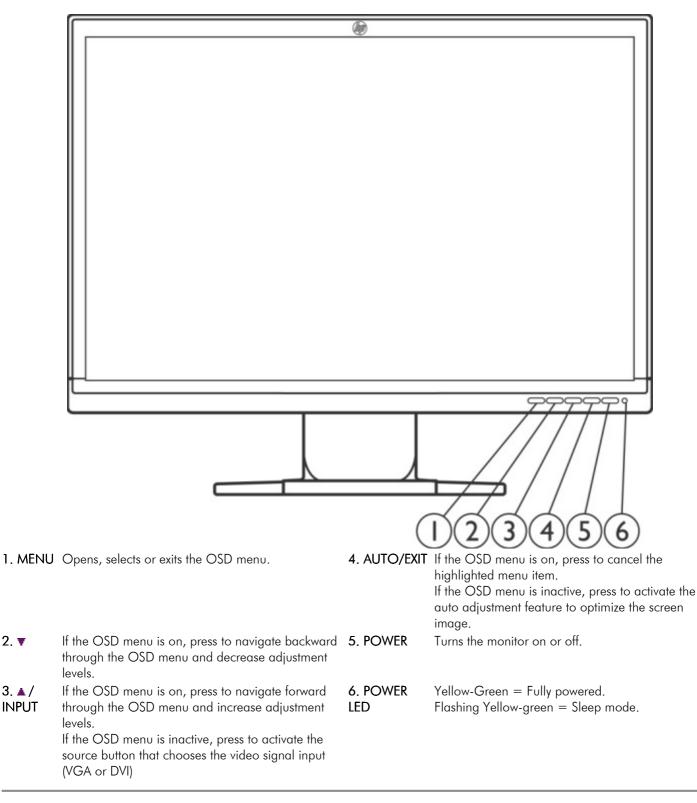


Overview





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HP Compaq L190w 19-inch LCD Monitor

Overview

Models

QJ621A2#ABA, A837738 (direct)



Technical Specifications

Panel	Туре	TN (Twisted Nematic) CCFL Backlit LCD
ronei	Viewable Image Area	48,13 cm. (19 in.) widescreen; diagonally measured
	(diagonal)	
	Screen Opening (₩ x H)	40,82 x 25,52 cm. (16.07 x 10.05 in.)
	Aspect Ratio	16:10
	Viewing Angle (typical)	Up to 170° horizontal/160° vertical (10:1 minimum contrast ratio)
	Brightness (typical)*	300 nits (cd/m ²)
	Contrast Ratio (typical)*	1000:1
	Dynamic Contrast Ratio (typical)*	20,000:1
	Response Time (typical)*	5 ms (on/off)
	Pixel Pitch	0.2835 mm
	Backlight Lamp Life (to half brightness)	50,000 hours minimum
	Color Support	Over 16 million colors (through FRM)
	Color Gamut (typical)	72%
		ations represent the typical specifications provided by HP's component formance may vary either higher or lower.
On Screen Display	Buttons or Switches	"MENU" "🕶 "🔺 / INPUT" " AUTO/EXIT" "POWER"
(OSD) Controls	Languages	English, French, German, Italian, Spanish, Korean
	User Controls	Brightness, contrast, positioning, color temperature (warm, cool, custom), clock, clock phase, scaling, sharpness, OSD positioning, monitor management, source control, information and factory reset
Signal Interface/	Horizontal Frequency	31 to 80 kHz
Performance	Vertical Frequency	56 to 75 Hz
	Native Resolution	1440 x 900 @ 60 Hz
	Preset VESA Graphic	1440 x 900 @ 60 Hz
	Modes (non-interlaced)	1280 x 1024 @ 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
	Maximum Pixel Clock Speed	140 MHz (VGA); 140 MHz (DVI)
	User Programmable Modes	Yes (8)
	Anti-Glare	Yes
	Default Color Temperature	Warm (6500K)
Video/Other Inputs	Plug and Play	Yes



Technical Specifications

,	Input Connectors	VGA (analog), DVI-D w/	(HDCP	
	Input Impedance	75 Ohms (VGA)		
	Sync Input	TTL separate synch		
	Video/Other Cables	(1) (1) DVI-D cable, (1) '	VGA cable	
	Cable Lengths		ft.), DVI-D cable: 1,8 m. (5.9 ft.)	
Power	Input Power	100 - 240 VAC, 50/60		
	Typical Power Consumption	23 W		
	Maximum	35 W		
	Power Saving	< 1 W standby; < 1 W	off	
	Power Cable Length	1,8 m. (5.9 ft.)		
Mechanical	Dimensions (W x D x H)	Unpacked w/stand	43,9 x 18,5 x 36,8 cm. (17.3 x 7.3 x 14.5 in.)	
		Unpacked w/o stand (head only)	43,9 x 6,1 x 29,8 cm. (17.3 x 2.4 x 11.7 in.)	
		Packaged	48,6 x 11,8 x 51,7 cm. (19.13 x 4.65 x 20.35 in.)	
	Weight	Head Only	3,57 kg. (7.87 lb.)	
		Unpacked	3,9 kg. (8.6 lb.)	
		Packaged	5,6 kg. (12.35 lb.)	
	Tilt Range	-5° to $+15^{\circ}$		
	Swivel Range	No		
	Height Adjustable	No		
	Pivot Rotation	No		
	Base	Attachable, ships detach	ned	
Environmental	Temperature - Operating	10° to 40° C (50° to 104° F)		
	Temperature - Non- operating	-10° to 50° C (14° to 12	22° F)	
	Humidity - Operating	30% to 80% non-conde	nsing	
	Humidity - Non-operating	g 5% to 90% non-condens	sing	
	Altitude - Operating	0 to 3000 m. (9,843 ft.)	
	Altitude - Non-operating	0 to 12000 m. (39,370) ft.)	
	White LED Backlights	No		
	CCFL Panel	Yes		
	Arsenic-Free Glass ⁴	Yes		
	BFR/PVC Free	Plastics and Finishes or	Paint	
	Mercury Free	No		
Environmental Data	Eco-Label Certifications & Declarations	•	d or is in the process of being certified to the may be labeled with one or more of these marks:	
		 US Energy Star® IT ECO declaration EPEAT® Silver who 	on HP registers commercial display products. See	

• EPEAT® Silver where HP registers commercial display products. See http://www.epeat.net for registration status in your country.



Technical Specifications

Energy Consumption (in accordance with US ENERGY STAR® test method) Normal Operation	11 5VAC, 60Hz 20.9 W	230VAC, 50H z 20.9 W	1 00VAC, 60Hz N/A
	0.712 W	0.832 W	N/A
Sleep			
Off	0.59 W	0.672 W	N/A
Heat Dissipation*	115VAC, 60Hz	230VAC, 50Hz	100VAC, 60Hz
Normal Operation	71 BTU/hr	71 BTU/hr	N/A
Sleep	2 BTU/hr	3 BTU/hr	N/A
Off	2 BTU/hr	2 BTU/hr	N/A
	* Heat dissipation is calconsing service level is attained for	ulated based on the meas or one hour.	sured watts, assuming the
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). This product is in compliance with the IEEE 1680 (EPEAT) standard at the Silver level, see www.epeat.net 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 97.2% recycle-able when properly disposed of at end of life. 		
Packaging Materials	External:	Wood (pallet)	15600g
	Internal:	EPS (Expanded Polystyrene)	162g
		Polyethylene high dens	ity 16g
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 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	regulatory limits (refer to	fo/globalcitizenship/envir	tion for the Environment at:

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• Certain Brominated Flame Retardants - may not be used as flame

HP Compaq L190w 19-inch LCD Monitor

Technical Specifications

retardants	in	р	lastics
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- 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)

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: 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.

For more information about HP's commitment to the environment:

Hewlett-Packard Corporate Environmental

Packaging



Technical Specificat	tions	
	Information	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 Single Monitor Arm Part number BT861AA	The flexible design of the HP Single Monitor Arm provides a seemingly endless range of display adjustments with an amazing 13 inches of lift, 50 degrees of tilt, and 360 degrees of pan and rotation - all at your fingertips helping you stay comfortable and productive throughout the day.
	HP Adjustable Dual Display Stand Part Number AW664AA	Premium space-saving dual screen solution provides access to more monitor real estate and makes it possible to manage multiple applications simultaneously. Weight adjustable for dual monitors from 17-24". Rotate displays into portrait/landscape positions.
	HP LCD Monitor Quick Release Part number EM870AA ¹	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.
	HP Integrated Work Center Stand Part number GN783AA HP USB Graphics Adapter Part number NL571AA	Allows mounting of a 17 - 23 inch diagonal HP LCD monitor and an HP Compaq dc8000 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. 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 Software User Guide Languages	AC Power cable, VGA cable, DVI-D cable Yes - Monitor Driver English
	Warranty Languages Color VESA External Mounting Security Lock-Ready	Black Yes (one set of standard 4-hole pattern, 100 mm). Yes
Certification and Compliance	CSA 60950-1, UL 60950-1, FCC Part 15 class B Approval, ENERGY STAR® qualified, EPEAT™ Silver (where HP registered) ³	
Compatibility	Compatible with platforms using the VESA standard video modes. Recommended for use with HP products.	
Service and Warranty	Protected by HP, including a 3 years parts, 3 years labor, and 3 years onsite service (3/3/3) standard limited warranty. 24-hour, toll-free service support at (888) 518-3207 or visit the TAA exclusive service website at: www.hpgovernmentmonitor.com. Certain restrictions and exclusions apply. ²	



Technical Specifications

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¹ 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.

² 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.

³ EPEAT Silver where HP registers commercial display products. See www.epeat.net for registration status in your country.
 ⁴ Arsenic and its compounds were not detected using US EPA Test Methods 3052 & 3052/6010b by ICP or ICP-AES.

All specifications represent the typical specifications provided by HP's component manufacturers; actual performance may vary either higher or lower. The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.

