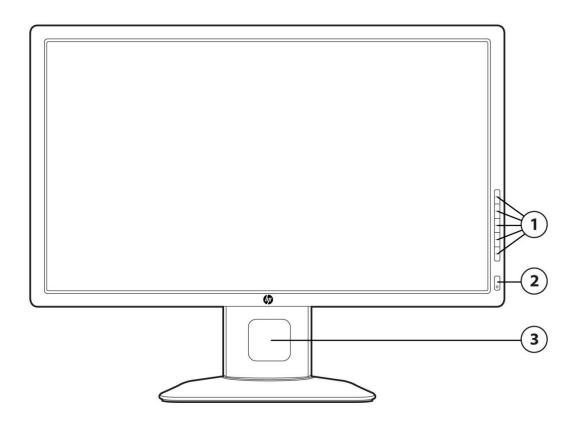
Overview

## **HP DreamColor Z27x Professional Display**



1. **Programmable** 4 user-assignable function buttons **Function** 

**2. Power/LED** Power On/Off

**buttons** 

LED:

fully powered = white or red, user selectable;

sleep mode = amber;

sleep timer mode = flashing amber.

**3. Cable** Effortless routing of cables through the cable management tunnel at the base of the column. **Management** 

### **Technical Specifications**

Models: D7R00A4, D7R00A8, D7R00AS, D7R00AT

Panel	Type	27-inch IPS Gen 2, with HP Ultra Black techonology and advanced
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wide gamut LED Backlight. (Gen 2 IPS technology, also called AH-

IPS, enables lower power consumption).

Viewable Image Area 68,58 cm (27 in) widescreen; diagonally measured

(diagonal)

Panel Active Area (W × H) 59,67 × 33,56 cm (23.49 × 13.21 in.)

**Resolution** 2560×1440 @ 60, 50 or 48 Hz native sync

Aspect Ratio 16:9

Viewing Angle Up to 178° horizontal/178° vertical typical (10:1 minimum contrast

ratio)

**Brightness** 48 to 250 cd/m<sup>2</sup> calibrated

Contrast Ratio 800:1 minimum

**Response Time \*** 12 ms Gray to Gray typical

Pixel Pitch 0.2331 mm

**Backlight Lamp Life** 50,000 hours minimum

(to half brightness)

**Color Production** Up to 1.07 billion colors

Color Gamuts (Calibrated) 100% of sRGB, 100% of BT.709, 100% of AdobeRGB, 99% of DCI-P3

(CIE 1976)

\*All performance specifications represent the typical specifications provided by HP's component manufacturers; actual performance may vary either higher or lower.

**User Controls Buttons or Switches** Four user-definable function keys, Open/Close Menu, Power

Languages 10 (English, Spanish, German, French, Italian, Netherlands,

Portuguese, Japanese, T-Chinese and S-Chinese)

**On Screen Display**Color Space, Video Input, Image Adjustment, PIP Control,
USD) **User Controls**Language, Management, Menu and Message Control,

Information, Factory Reset, Display Mode Information

DreamColor Functions **DreamColor Engine 2** Internal color palette of 4.4 Trillion colors driven by 14-bit internal

color precision. The engine outputs 10-bit color that produces 1,024 gray levels per channel and up to 1.07 billion on-screen

colors. Includes 4K input support.

Factory Calibrated Presets sRGB D65, sRGB D50, AdobeRGB, BT.709, BT.2020, DCI-P3 and

Native

**User Calibration support**Calibrate with direct-connection of optional HP DreamColor

calibration solution (listed under options below) or with directconnection of a range of third-party professional color

measurement devices.

**DreamColor Ports**Two HP DreamColor USB ports allow connection of professional

measurement device for calibration or flash drive for customized

calibration and firmware updates.

Signal Interface/ Horizontal Frequency 24–113 kHz

### **Technical Specifications**

Performance	Vertical Frequency	24-60 Hz
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**Native Resolution** 2560×1440 @ 60, 50 or 48 Hz

Preset Graphic Modes (non- 640×480 @ 59.94 or 60 Hz (progressive or interlaced)

interlaced) 720×480 @ 59.94 or 60 Hz (progressive or interlaced, 4:3 or 16:9)

720×576 @ 50 Hz (progressive or interlaced, 4:3 or 16:9)

800×600 @ 60.317 Hz 1024×768 @ 60.004 Hz

1280×720 @ 23.976, 24, 29.97, 30, 50, 59.94 or 60 Hz

1280×1024 @ 60.020 Hz 1366×768 @ 60.000 Hz 1600×1200 @ 60.000 Hz

1920×1080 @ 23.976, 24, 29.97, 30, 50, 59.94 or 60 Hz

(progressive)

1920×1080 @ 29.97, 30, 50, 59.94 or 60 Hz (interlaced)

1920×1200 @ 59.950 Hz 1920×1200 @ 59.995 Hz

2048×1080 @ 24, 25, 48, 50, or 60 Hz

2560×1440 @ 48, 50 or 60 Hz 2560×1600 @ 59.97 Hz 3840×2160 @ 24, 25 or 30 Hz

4096×2160 @ 24 Hz

Maximum Pixel Clock Speed 297 MHz
User Programmable Modes 10

Anti-Glare Yes

**Factory Calibrated Color** 

**Temperatures** 

D65, D50 or P3

## Video/Other Inputs

Plug and Play Yes

**Self-Powered USB 3.0 Hub** 4 USB 3.0 (two side and two rear)

**DreamColor Ports** 2 USB 2.0 DreamColor ports (for connecting color instruments

and flash drives)

Input Connectors (1) DisplayPort 1.2, (1) DisplayPort 1.1, (1) HDMI 1.4; HDCP support

on all inputs.

**Video Cables Included** (1) DisplayPort **1,8 m** (5.9 ft); (1) HDMI **1,8 m** (5.9 ft);

(1) Mini-DisplayPort to DisplayPort 1,8 m (5.9 ft);

**USB Cable Included** (1) USB 3.0 **1,8 m** (5.9 ft)

Audio (1) Analog audio out, (1) Digital/SPDIF audio out

**Audio Cable Included** (1) Audio cable **1,8 m** (5.9 ft)

Power Supply Internal

**Input Power** 90–265 VAC at 45–63 Hz

ENERGY STAR® Power¹ 54.1 W

Default Power² 65 W

Maximum Power³ < 110 W

Sleep Power ≤ 1.2 W



## **Technical Specifications**

**Power Cable Length** 

Mechanical	Dimensions (W × D × H)	Unpacked w/stand	64,1 × 24,24 × 42,04 cm

(lowest setting) (25.24 × 9.55 × 15.55 in)

Unpacked w/o stand (head only) (25.24 × 2.58 × 14.93 in)

Packaged 73,1 × 30,5 × 49,7 cm

аскадей /3,1 × 30,5 × 49,7 ст (28.8 × 12 × 19.6 in)

Weight Head Only 6,4 kg (14.1 lb)

1,9 m (6.2 ft)

 Unpacked
 8,8 kg (19.4 lb)

 Packaged
 11,1 kg (24.5 lb)

Ergonomic Features **4-Way Comfort Adjust** Easily adjust the display in height, tilt, swivel and pivot for

maximum comfort.

Integrated Quick Release<sup>7</sup> 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.

**Cable Management** Enhanced cable management for easy concealment of power, video

and USB cables. Effortless routing of cables through the cable

management tunnel at the base of the column.

**Detachable Stand**Tilt Range

-5° to + 20° vertical

Swivel Range 45°L to 45°R

Height Adjustable Yes, 0 to 120 mm

Pivot Rotation Yes

Environmental Temperature - Operating 5° to 35° C (41° to 95° F)

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

Humidity - Operating 20% to 80% non-condensing

Humidity - Non-operating 5% to 95%, 38.7° C max wet-bulb

Altitude - Operating 0 to 5,000 m (0 to 16,404 ft)

Altitude – Non-operating 0 to 12,192 m (0 to 40,000 ft)

White LED Backlights Yes
CCFL Panel No
Arsenic-Free Display Glass Yes

**Low Halogen<sup>4</sup>** Yes (except cables)

Mercury-Free Display Backlighting Ye

Environmental Data **Eco-Label Certifications &** 

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

- US ENERGY STAR®
- TCO 6.0



100VAC. 60Hz

### **Technical Specifications**

EPEAT® Gold registered in the United States. See http://www.epeat.net for registration status in your country

Energy Consumption
(in accordance with US ENERGY
STAR® test method)

Normal Operation	67.7 W	67.7 W	67.7 W
Sleep	1.2 W	1.2 W	1.2 W
Off	0.5 W	0.5 W	0.5 W

115VAC. 60Hz

<b>Heat Dissipation*</b>	115VAC, 60Hz	230VAC, 50Hz	100VAC, 60Hz
Normal Operation	232 BTU/hr	232 BTU/hr	232 BTU/hr
Sleep	4 BTU/hr	4 BTU/hr	4 BTU/hr
Off	2 BTU/hr	2 BTU/hr	2 BTU/hr

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

230VAC. 50Hz

#### **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 Gold 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 12.4 % post-consumer recycled plastic
- This product is 97.6 % recycle-able when properly disposed of at end of life.

Packaging Materials	External:	PAPER/Corrugated	1068 g
	Internal:	PLASTIC/EPS (Expanded Polystyrene)	104 g

PLASTIC/Polystyrene 676 g

High Impact

**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).

This product does not contain any of the following substances in **Material Usage** 

excess of regulatory limits (refer to the HP General Specification for

the Environment at:



### **Technical Specifications**

http://www.hp.com/hpinfo/qlobalcitizenship/environment/
pdf/gse.pdf):

- 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
- Polvbrominated Biphenvls (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: <a href="http://www.hp.com/qo/reuse-recycle">http://www.hp.com/qo/reuse-recycle</a> or contact your nearest HP sales office. Products returned to HP will be recycled, recovered or disposed of in a responsible manner.



### **Technical Specifications**

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** 

http://www.hp.com/hpinfo/qlobalcitizenship/qcreport/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**For more information refer to the product's QuickSpecs.

HP DreamColor Calibration System
—B1F63AA

The HP DreamColor Calibration Solution (DCS) is an affordable direct-connect measurement instrument for the Z27x, allowing users to quickly and accurately recalibrate their monitor. DCS kit includes calibration software for host-based calibration of the HP Z24x and other HP DreamColor displays and notebooks.

HP LCD Speaker Bar—NQ576AA

Powered directly by the monitor or the 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 external jack for headphones. Sold separately.

HP HD141 Hood Kit for Z27x
—G0M47AA

The HP HD141 Hood Kit is designed to reduce the glare and color cast caused by environment lighting. Recommended for color-critical users who work in areas where the lighting cannot be controlled.

HP DisplayPort Cable Kit —Part number VN567AA

Connects a DisplayPort connector on an HP Business Desktop computer to a DisplayPort connector on a monitor

HP Business PC Security Lock Kit— 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.

What's in the box?

**Monitor and Accessories** 

**Warranty Languages** 

HP DreamColor Z27x Professional Display, AC power cord, USB cable, DisplayPort cable, HDMI cable, DisplayPort mini cable, Audio

cable

**Documentation** DVD documentation kit, factory calibration report

Other User Guide Languages

English, Arabic, Bahasa Indonesia, S. Chinese, T. Chinese, Czech, Danish, Dutch, Finnish, French, German, Greek, Hungarian, Italian, Japanese, Kazakh, Korean, Norwegian, Polish, B. Portuguese, Russian,

Slovenian, Spanish, Swedish and Turkish.

English, Arabic, Bahasa Indonesia, S. Chinese, T. Chinese, Czech, Danish, Dutch, Finnish, French, German, Greek, Hungarian, Italian,

Japanese, Kazakh, Korean, Norwegian, Polish, B. Portuguese, Russian,

Slovenian, Spanish, Swedish and Turkish.

### **Technical Specifications**

**Color** Black

**VESA External Mounting**Yes (one set of standard 4-hole pattern, 100 mm). Use of the top

VESA 4-hole pattern will allow the user to set monitor head lower to

the desk surface.

Security Lock-Ready Yes
Country of Origin China

Certification and Compliance

TCO Certified, CEL Grade 2, Microsoft WHQL Certification (Windows 8 and Windows 7), ENERGY STAR® Qualified, EPEAT® Gold⁵. CE, CB ,KC, KCC, NOM, PSB, ICE, TUV-S, CCC, CEL, SEPA, EPA, ISC, VCCI, FCC. Taiwan:

BSMI

**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 year standard limited warranty. Optional HP Care Pack Services are extended service contracts that extend your protection beyond the standard warranties.<sup>6</sup>

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ENERGY STAR is a registered mark owned by the U.S. government. 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.

- ENERGY STAR® power is measured with factory defaults, brightness at ENERGY STAR® level of 200 cd/m² and with no USB loads.
- 2. Default Power is measured with factory defaults, including factory default brightness and USB ports loaded at 25% of maximum.
- Maximum Power is measured with monitor at maximum brightness and with USB ports loaded at 100% of maximum.
- External power supplies, power cords, cables and peripherals are not Low Halogen. Service parts obtained after purchase may not be Low Halogen.
- 5. EPEAT® Gold where HP registers commercial display products. See www.epeat.net for registration status in your country.
- 6. Service levels and response times for HP Care Pack Services may vary depending on your geographic location. Service starts from date of hardware purchase. Restrictions and limitations apply. See www.hp.com/go/cpc for details.
- 7. 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.



**Technical Specifications** 

Chan	ge Log
April 1	<b>1, 2014</b> - From Version Feb. 24 to April 11
	<u>Added</u>
	Adding additional model numbers and environmental data.

