

Aurora R6

Setup and Specifications

Computer Model: Alienware Aurora R6
Regulatory Model: D23M
Regulatory Type: D23M001

A L I E N W A R E™ 

Notes, cautions, and warnings



NOTE: A NOTE indicates important information that helps you make better use of your product.



CAUTION: A CAUTION indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.



WARNING: A WARNING indicates a potential for property damage, personal injury, or death.

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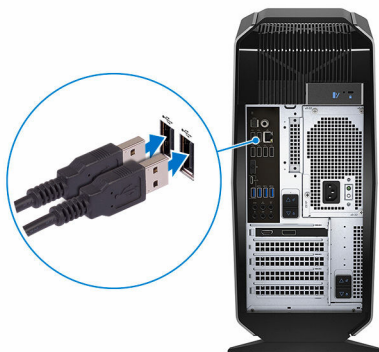
Rev. A00

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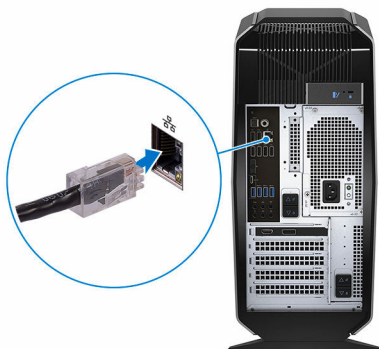
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Set up your computer

- 1 Connect the keyboard and mouse.



- 2 Connect the network cable — optional.



3 Connect the display.



 **NOTE:** The DisplayPort on the back panel of your computer is covered. Connect the display to the discrete graphics card of your computer.

 **NOTE:** If you have two graphics cards, the card installed in PCI-Express X16 (graphics slot 1) is the primary graphics card.

4 Connect the power cable.



- 5** Press the power button.



Setting up the Virtual Reality (VR) headset — optional



NOTE: The VR headset is sold separately.

- 1 Download and run the setup tools for your VR headset at www.dell.com/VRsupport.
- 2 Connect the VR headset to the designated USB and HDMI ports on your computer, when prompted.

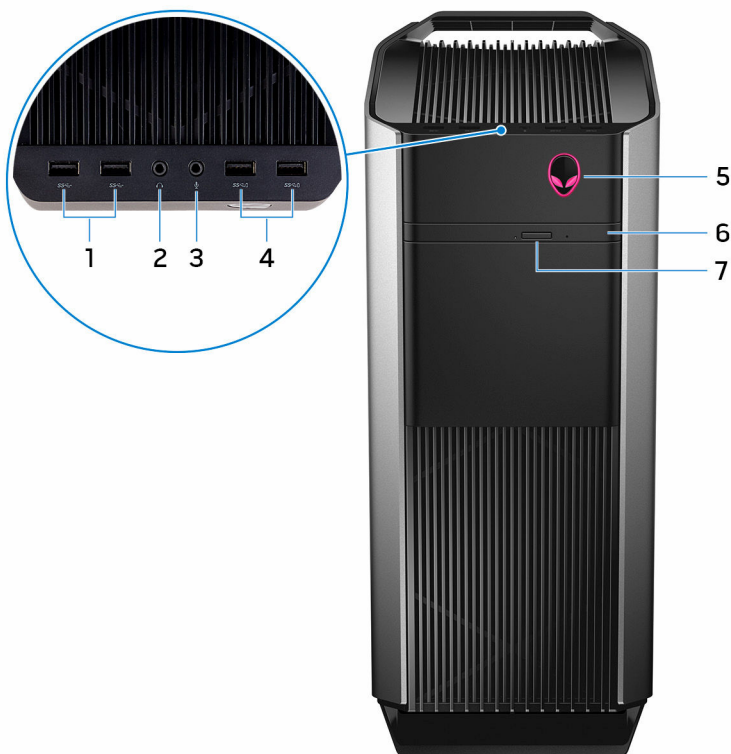


NOTE: Connect the headset to the HDMI port on the primary graphics card and connect the display to any available port on the card.

- 3 Follow the instructions on the screen to complete the setup.

Views

Front



1 **USB 3.0 ports (2)**

Connect peripherals such as storage devices and printers. Provide data transfer speeds up to 5 Gbps.

2 **Headphone port**

Connect a headphone or speakers.

3 **Microphone port**

Connect an external microphone to provide sound input.

4 **USB 3.0 ports with PowerShare (2)**

Connect peripherals such as storage devices and printers. Provides data transfer speeds up to 5 Gbps.

PowerShare allows you to charge your USB devices even when your computer is turned off.

5 **AlienHead/Power button**

Press to turn on the computer if it is turned off or in sleep state.

Press to shut down the computer if it is turned on.

Press and hold for 4 seconds to force shut-down the computer.

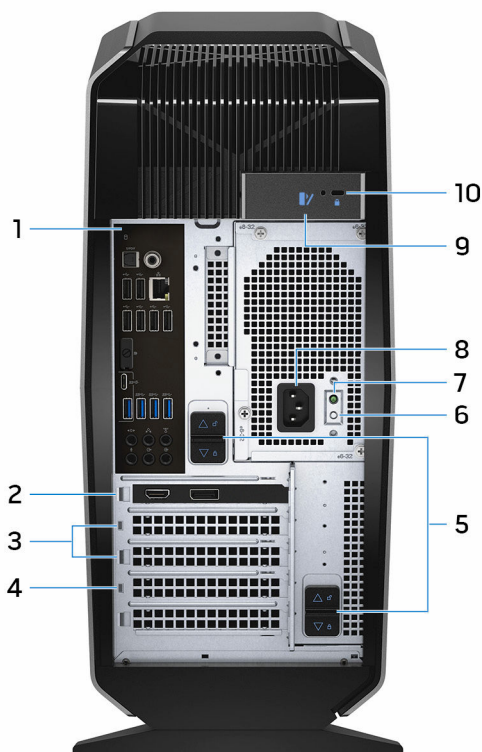
6 **Optical drive (optional)**

Reads from and writes to CDs, DVDs, and Blu-ray discs.

7 **Optical-drive eject button**

Press to open or close the optical drive tray.

Back



1 Back panel

Connect USB, audio and other devices.

2 PCI-Express X16 (graphics slot 1)

Connect a PCI-Express card such as graphics, audio, or network card to enhance the capabilities of your computer.

For optimal graphics performance, use a PCI-Express X16 slot for connecting the graphics card.



NOTE: If you have two graphics cards, the card installed in PCI-Express X16 (graphics slot 1) is the primary graphics card.

3 **PCI-Express X4 slots (2)**

Connect a PCI-Express card such as graphics, audio, or network card to enhance the capabilities of your computer.

4 **PCI-Express X16 (graphics slot 2)**

Connect a PCI-Express card such as graphics, audio, or network card to enhance the capabilities of your computer.

For optimal graphics performance, use a PCI-Express X16 slot for connecting the graphics card.

5 **Power-supply cage release-latches (2)**

Allows you to remove the power supply unit from your computer.

6 **Power-supply diagnostics button**

Press to check the power-supply state.

7 **Power-supply diagnostics light**

Indicates the power-supply state.

8 **Power port**

Connect a power cable to provide power to your computer.

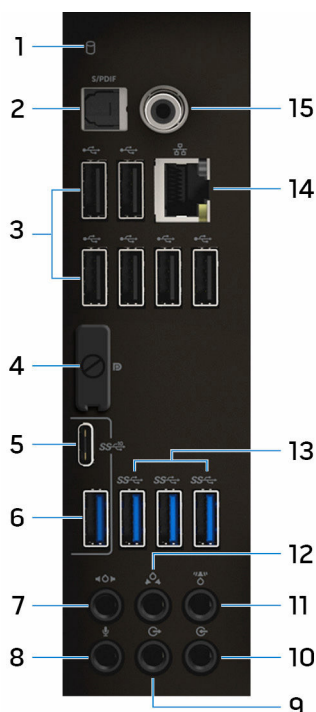
9 **Side panel release latch**

Allows you to remove the side panel from your computer.

10 **Security-cable slot**

Connect a security cable to prevent unauthorized movement of your computer. This prevents the side panel release latch from opening.

Back panel



1 Hard-drive activity light

Turns on when the computer reads from or writes to the hard drive.

2 Optical S/PDIF port

Connect an amplifier, speakers, or a TV for digital audio output through optical cables.

3 USB 2.0 ports (6)

Connect peripherals such as storage devices and printers. Provides data transfer speeds up to 480 Mbps.

4 DisplayPort

Connect an external display or a projector.



NOTE: The DisplayPort on the back panel of your computer is covered. Connect the display to the discrete graphics card of your computer.

5 USB 3.1 Type-C port

Connect peripherals, such as external storage devices and printers. Provides data transfer speeds up to 10 Gbps.

6 USB 3.1 Type-A port

Connect peripherals, such as storage devices and printers. Provides data transfer speeds up to 10 Gbps.

7 Side L/R surround port

Connect the side-left and side-right speakers or surround sound speakers.

8 Microphone port

Connect an external microphone to provide sound input.

9 Front L/R surround line-out port

Connect audio-output devices such as speakers and amplifiers. In a 5.1 speaker channel setup, connect the front-left and front-right speakers.

10 Line-in port

Connect recording or playback devices such as a microphone or CD player.

11 Center/subwoofer LFE surround port

Connect the subwoofer.



NOTE: For more information about the speaker setup, refer the documentation that shipped with the speakers.

12 Rear L/R surround port

Connect audio-output devices such as speakers and amplifiers. In a 5.1 speaker channel setup, connect the rear-left and rear-right speakers.

13 USB 3.0 ports (3)

Connect peripherals such as storage devices and printers. Provides data transfer speeds up to 5 Gbps.

14 Network port

Connect an Ethernet (RJ45) cable from a router or a broadband modem for network or internet access.

The two lights next to the connector indicate the connectivity status and network activity.

15 **Coaxial S/PDIF port**

Connect an amplifier, speakers, or a TV for digital audio output through coaxial cables.

Specifications

Dimensions and weight

Table 1. Dimensions and weight

Height	472.5 mm (18.60 in)
Width	212 mm (8.34 in)
Depth	360.50 mm (14.19 in)
Weight	14.62 kg (32.23 lb)



NOTE: The weight of your computer varies depending on the configuration ordered and the manufacturing variability.

System information

Table 2. System information

Computer model	Alienware Aurora R6
Processor	7th Generation Intel Core i3 7th Generation Intel Core i5/i5k 7th Generation Intel Core i7/i7k



NOTE: If your computer is shipped with an Intel Core i5k or Intel Core i7k processor, you can overclock the processing speed beyond the standard specifications.

Chipset	Intel Z270 chipset
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Memory

Table 3. Memory specifications

Slots	Four DIMM sockets
Type	DDR4
Speed	▪ 2400 MHz ▪ Up to 2667 MHz with XMP (optional)
Configurations supported	4 GB, 8 GB, 16 GB, 32 GB, and 64 GB (2400 MHz only)

Ports and connectors

Table 4. Ports and connectors on the back panel

Back panel:	
Network	One RJ45 port
USB	▪ Six USB 2.0 ports ▪ One USB 3.1 Type-C port ▪ One USB 3.1 Type-A port ▪ Three USB 3.0 ports
Audio	▪ One audio input/microphone port ▪ One optical S/PDIF port ▪ One coaxial S/PDIF port ▪ One front L/R surround line-out port ▪ One side L/R surround port ▪ One rear L/R surround port ▪ One center/subwoofer LFE surround port ▪ One line-in port
Video	One DisplayPort - optional

Back panel:



NOTE: The DisplayPort on the back panel of your computer is covered. Connect the display to the discrete graphics card of your computer.

Table 5. Ports and connectors on the front panel

Front panel:

USB	▪ Two USB 3.0 ports ▪ Two USB 3.0 ports with PowerShare
Audio	▪ One audio output/headphone port ▪ One audio input/microphone port

Communications

Table 6. Supported Communications

Ethernet	10/100/1000 Mbps Killer E2400 Ethernet controller integrated on system board
Wireless	▪ 802.11b/g/n ▪ 802.11ac ▪ Bluetooth 4.1/Bluetooth 4.2

Video

Table 7. Video specifications

Integrated:

Controller	Intel HD Graphics 630
Memory	Shared system memory

Discrete:

Integrated:

Type	Up to two PCI-Express X16, single-width/ double-width, full length (maximum 10.5 inches)
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NOTE: The graphics configuration of your desktop varies depending on the graphics card configuration ordered.

Controller	▪ AMD or NVIDIA ▪ Also supports Dual AMD or NVIDIA (SLI)
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Memory	Up to 12 GB
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Audio

Table 8. Audio specifications

Controller	Realtek ALC3861
Type	Integrated 7.1 channel audio with S/PDIF support

Storage

Table 9. Storage specifications

Interface	SATA 6 Gbps
Externally accessible	One 5.25-inch drive bay for DVD+/-RW drive, Blu-ray Disc combo (optional), or Blu-ray Disc writer (optional)

Internally accessible

Solid-state drive (SSD)	One M.2 drive
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NOTE: If you purchased an M.2 drive, it is assigned as primary drive and all other SATA drives in your computer are assigned as secondary drives.

One 3.5-inch drive bay	For one 3.5-inch SATA drive or two 2.5-inch SATA drives (optional)
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NOTE: If your computer is shipped with one 3.5-inch SATA drive, it is the primary drive. If your computer is shipped with two 2.5-inch SATA drives, one is primary drive and the other is secondary drive.

Two 2.5-inch drive bays

For two 2.5-inch SATA drives



NOTE: The SATA drives installed in these drive bays are secondary drives.

Power ratings

Table 10. Power adapter specifications

Input voltage	100 VAC–240 VAC	
Input frequency	50 Hz–60 Hz	
Temperature range		
Operating	5°C to 50°C (41°F to 122°F)	
Storage	–40°C to 70°C (–40°F to 158°F)	
Type	460 W	850 W
Input current (maximum):	8 A	10 A
Output current:	3.3V/17A, 5V/25A, 12VA/18A, 12VB/16A, 12VC/8A, 5V _{aux} /3A	3.3V/20A, 5V/20A, 12VA/32A, 12VB/48A, 12VD/16A, –12V/0.5A, 5V _{aux} /4A
Rated output voltage:	3.3V, 5V, 12VA, 12VB, 12VC, 5V _{aux}	3.3V, 5V, 12VA, 12VB, 12VD, –12V, 5V _{aux}

Computer environment

Airborne contaminant level: G2 or lower as defined by ISA-S71.04-1985

Table 11. Computer environment

	Operating	Storage
Temperature range	5°C to 35°C (41°F to 95°F)	–40°C to 65°C (–40°F to 149°F)
Relative humidity (maximum)	10% to 90% (non-condensing)	0% to 95% (non-condensing)
Vibration (maximum)	0.26 GRMS	1.37 GRMS
Shock (maximum)*	40 G for 2 ms with a change in velocity of 20 in/s (51 cm/s)†	105 G for 2 ms with a change in velocity of 52.5 in/s (133 cm/s)‡
Altitude (maximum)	–15.20 m to 3048 m (–50 ft to 10,000 ft)	–15.20 m to 10,668 m (–50 ft to 35,000 ft)

* Measured using a random vibration spectrum that simulates user environment.

† Measured using a 2 ms half-sine pulse when the hard drive is in use.

Getting help and contacting Alienware

Self-help resources

You can get information and help on Alienware products and services using these online self-help resources:

Table 12. Alienware products and online self-help resources

Information about Alienware products and services	www.alienware.com
Troubleshooting information, user manuals, setup instructions, product specifications, technical help blogs, drivers, software updates, and so on	www.alienware.com/gamingservices
Videos providing step-by-step instructions to service your computer	www.youtube.com/alienwareservices

Contacting Alienware

To contact Alienware for sales, technical support, or customer service issues, see www.alienware.com.



NOTE: Availability varies by country and product, and some services may not be available in your country.



NOTE: If you do not have an active internet connection, you can find contact information on your purchase invoice, packing slip, bill, or Dell product catalog.