

Alienware Area-51 R4

Setup and Specifications

Computer Model: Alienware Area-51 R4
Regulatory Model: D03X
Regulatory Type: D03X002

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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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 (graphics) slot 4 is the primary graphics card.

4 Connect the power cable.



5 Press the power button.



Setting up the Virtual Reality (VR) headset — optional

- 1 Download and run the setup tools for your VR headset at www.dell.com/VRsupport.
- 2 Connect the VR headset to any USB 3.1 Gen 1 ports on the back of your computer and HDMI port on your computer, when prompted.

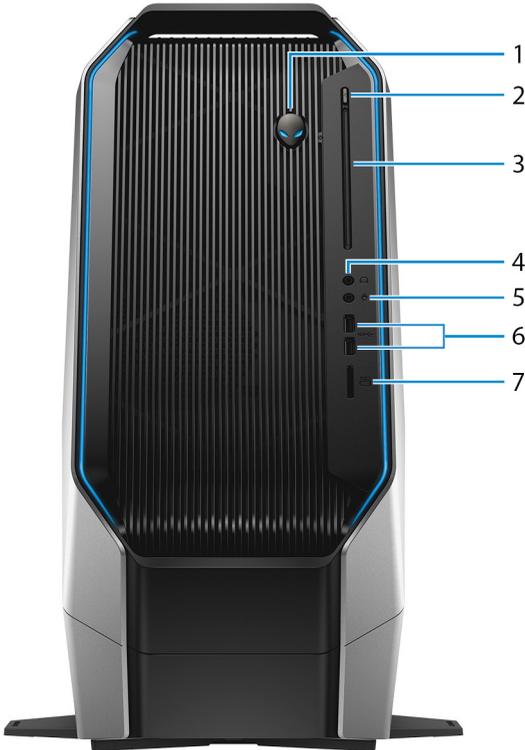


NOTE: Connect the headset to the HDMI port on the discrete graphics card and connect the display to any available port on the card.

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

Views

Front



1 Power button (Alienhead)

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

Press to put the computer in sleep state if it is turned on.

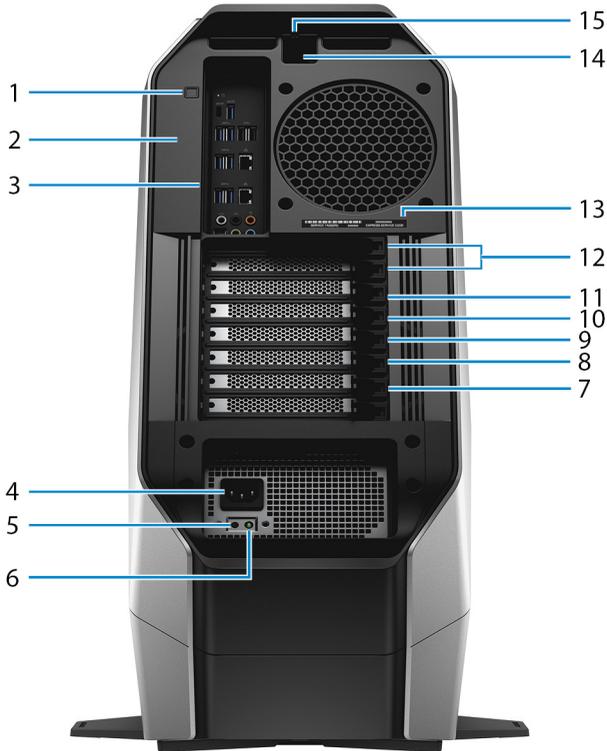
Press and hold for 4 seconds to force shut-down the computer.



NOTE: You can customize the power-button behavior in Power Options.

- 2 **Optical-drive eject button**
Press to open or close the optical drive tray.
- 3 **Optical drive**
Reads from and writes to CDs and DVDs.
- 4 **Headphone port**
Connect a headphone or speakers.
- 5 **Microphone port**
Connect an external microphone to provide sound input.
- 6 **USB 3.1 Gen 1 ports (2)**
Connect peripherals such as storage devices and printers. Provides data transfer speeds up to 5 Gbps.
- 7 **Media-card reader**
Reads from and writes to media cards.

Back



- 1 Rear I/O accessibility lighting button**
Press to illuminate the back panel ports.
- 2 Regulatory label**
Contains regulatory information of your computer.
- 3 Back panel**
Connect USB, audio, video, and other devices.
- 4 Power cable connector**
Connect a power cable to provide power to your computer.
- 5 Power-supply diagnostics button**

Press to check the power-supply state.

6 Power-supply diagnostics light

Indicates the power-supply state.

7 PCI-Express (graphics) slot 7

Connect a PCI-Express X16 card such as graphics, audio, or network card to enhance the capabilities of your computer.



NOTE: If you have three graphics cards, slot 4 will be the primary graphics card.

8 PCI-Express slot 6

Connect a PCI-Express X4 card such as graphics, audio, or network card to enhance the capabilities of your computer.

9 PCI-Express slot 5

Connect a PCI-Express X8 card such as graphics, audio, or network card to enhance the capabilities of your computer.



NOTE: If you have two graphics cards, slot 4 will be the primary graphics card.

10 PCI-Express (graphics) slot 4

Connect a PCI-Express X16/X8 card such as graphics, audio, or network card to enhance the capabilities of your computer.

11 PCI-Express slot 3

Connect a PCI-Express X8 card such as graphics, audio, or network card to enhance the capabilities of your computer.

12 PCI-Express (graphics) slot 1

Connect a PCI-Express X16/X8 card such as graphics, audio, or network card to enhance the capabilities of your computer.



NOTE: For more details on installing the PCI-Express graphics card, see [PCI-Express graphics card installation matrix](#).

13 Service Tag label

The Service Tag is a unique alphanumeric identifier that enables Dell service technicians to identify the hardware components in your computer and access warranty information.

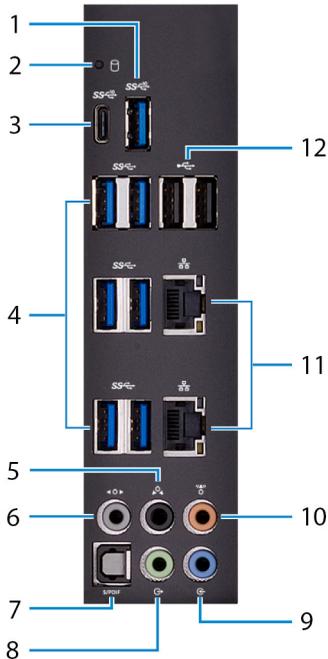
14 Security-cable slot (for Kensington locks)

Connect a security cable to prevent unauthorized movement of your computer.

15 Security-cable slot latch

Release to allow opening the side panel.

Back panel



1 USB 3.1 Gen 2 port

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

2 Hard-drive activity light

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

3 USB 3.1 Gen 2 (Type-C) port with PowerShare

Connect peripherals such as storage devices and printers.

Provides data transfer speeds up to 10 Gbps. Supports Power Delivery that enables two-way power supply between devices. Provides up to 15 W power output that enables faster charging.

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



NOTE: The Type-C port only provides the USB data function, and no alternate video or Thunderbolt mode features are supported.

4 **USB 3.1 Gen 1 ports (6)**

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

5 **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.

6 **Side L/R surround port**

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

7 **Optical S/PDIF port**

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

8 **Line-out port**

Connect speakers.

9 **Line-in port**

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

10 **Center/subwoofer port**

Connect the subwoofer.

11 **Network ports (2)**

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

12 **USB 2.0 ports (2)**

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

Specifications

Dimensions and weight

Table 1. Dimensions and weight

Height	569.98 mm (22.44 in)
Width	638.98 mm (25.15 in)
Depth	272.71 mm (10.73 in)
Weight (maximum)	28 kg (61.73 lbs)



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

Computer model

Table 2. Computer model

Computer model	Alienware Area-51 R4
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System information

Table 3. System information

Processor	Intel Core X-series
Chipset	Intel X299 PCH

Memory

Table 4. Memory specifications

Slots	Four internally-accessible DDR4 DIMM sockets
Type	DDR4
Speed	2666 MHz and 2933 MHz (XMP memory)



NOTE: The 2666 MHz memory works at 2400 MHz for the i7-7800X processors.

Configurations supported	
Per memory module slot	4 GB, 8 GB, and 16 GB
Total memory	8 GB, 16 GB, 32 GB, and 64 GB

Ports and connectors

Table 5. External ports and connectors

External	
Network	Two RJ45 ports
USB	<ul style="list-style-type: none">• Two USB 3.1 Gen 1 ports• One USB 3.1 Gen 2 port• USB 3.1 Gen 2 (Type-C) port with PowerShare• Six USB 3.1 Gen 1 ports• Two USB 2.0 ports
Audio/Video	<ul style="list-style-type: none">• Four audio output/headphone ports• One audio input/microphone port• One optical S/PDIF port
Media-card reader	One 9-in-1 card slot

Table 6. Internal ports and connectors

Internal	
M2	<ul style="list-style-type: none">• One M.2 card slot for WLAN and Bluetooth• One M.2 card slot for 2280 solid-state drive
Storage	Four SATA ports

Communications

Table 7. Supported communications

Ethernet	10/100/1000 Mbps Ethernet controller integrated on system board
Wireless	<ul style="list-style-type: none">• Wi-Fi 802.11ac• Bluetooth 4.1

Wireless module

Table 8. Wireless module specifications

Transfer rate	Up to 867 Mbps
Frequency bands supported	Dual band 2.4 GHz/5 GHz
Encryption	<ul style="list-style-type: none">• 64-bit and 128-bit WEP• TKIP• AES-CCMP

Audio

Table 9. Audio specifications

Controller	Realtek ALC3861
Type	<ul style="list-style-type: none">• Integrated 7.1 channel

- High Definition Audio with S/PDIF support

Video

Table 10. Video specifications

Type	Up to three PCI-Express, single/double-width, full length graphics card
Controller	<ul style="list-style-type: none"> • Single AMD • Single NVIDIA • Dual/Triple AMD (CrossFire) • Dual NVIDIA (SLI) <p> NOTE: The graphics configuration of your desktop varies depending on the power supply and graphics card configuration ordered.</p> <p> NOTE: Install either NVIDIA or AMD graphics card, when using with dual and triple graphics configurations.</p>

Storage

Table 11. Storage specifications

Externally accessible	<ul style="list-style-type: none"> • One 5.25-inch drive bay for DVD+/-RW, Blu-ray Disc combo (optional) • Blu-ray Disc writer (optional)
Internally accessible	<ul style="list-style-type: none"> • Three 3.5-inch drive bays for SATA hard drives • Two 2.5-inch drive bays for SATA solid-state drives

- Max up to total three hard drives support

Power ratings

Table 12. Power ratings

Type	850W	1500 W	1500 W
Input voltage		100 VAC-240 VAC	200 VAC-240 VAC
Input frequency		50 Hz-60 Hz	
Input current (maximum)	10 A	16 A	10 A
Output current	+3.3 V/20 A, +5 V/20 A, +12 VA/32 A, +12 VB/48 A, +12 VD/16 A, -12 V/0.5 A, +5 Vaux/4 A	+3.3 V/20 A, +5 V/25 A, +12 VA/32 A, +12 VB/48 A, +12 VC/48 A, +12 VD/16 A, -12 V/0.5 A, +5 Vaux/4 A	
Rated output voltage	+3.3 V, +5 V, +12 VA, +12 VB, +12 VD, -12 V, +5 Vaux	+3.3 V, +5 V, +12 VA, +12 VB, +12 VC, +12 VD, -12 V, +5 Vaux	
Temperature range			
Operating	5°C to 50°C (41°F to 122°F)		
Storage	-40°C to 70°C (-40°F to 158°F)		

Computer environment

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

Table 13. 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)	–15.24 m to 3048 m (–50 ft to 10,000 ft)	–15.24 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.

PCI-Express graphics card installation matrix

Table 14. PCI-Express graphics card installation matrix

PSU		Single Graphics	Dual Graphics	Triple Graphics
850 W	Slot installation	Slot 1	Slot 1 and Slot 4	Not supported
	Power connector label	PCIE 1	PCIE 1 and PCIE 3	
	Primary Output	Slot 1	Slot 4	
1500 W	Slot installation	Slot 1	Slot 1 and Slot 4	Slot 1 and Slot 4 and Slot 7
	Power connector label	PCIE 1	PCIE 1 and PCIE 3	PCIE 1 and PCIE 3 and PCIE 2
	Primary Output	Slot 1	Slot 4	Slot 4

PCI-Express Add-in-Card slot lane assignments

Table 15. PCI-Express Add-in-Card slot lane assignments

i9-7900X	Single card Config 1	Single card Config 2	Single card Config 3
Slot 1 (x16)	X		
Slot 3 (x8)			
Slot 4 (x16)		X	

i9-7900X	Single card Config 1	Single card Config 2	Single card Config 3
Slot 5 (x8)			
Slot 7 (x8)			X
Monitor connect	Slot 1	Slot 4	Slot 7

PCIe Add-in-Card Slot Lane Assignments

Table 16. PCI-Express Add-in-Card slot lane assignments

i9-7900X	Dual card Config 1	Dual card Config 2	Dual card Config 3
Slot 1 (x16)	X	X	
Slot 3 (x8)			
Slot 4 (x16)	X		X
Slot 5 (x8)			
Slot 7 (x8)		X	X
Monitor connect	Slot 4	Slot 1	Slot 4

PCIe Add-in-Card Slot Lane Assignments

Table 17. PCI-Express Add-in-Card slot lane assignments

i9-7900X	Triple card Config 1
Slot 1 (x16)	X
Slot 3 (x8)	
Slot 4 (x16)	X
Slot 5 (x8)	
Slot 7 (x8)	X
Monitor connect	Slot 4

PCIe Add-in-Card Slot Lane Assignments

Table 18. PCI-Express Add-in-Card slot lane assignments

i7-7820X and i7-7800X	Single card Config 1	Single card Config 2	Single card Config 3
Slot 1 (x8)	X		
Slot 3 (x8)			
Slot 4 (x8)		X	
Slot 5 (x0)			
Slot 7 (x8)			X
Monitor connect	Slot 1	Slot 4	Slot 4

PCIe Add-in-Card Slot Lane Assignments

Table 19. PCI-Express Add-in-Card slot lane assignments

i7-7820X and i7-7800X	Dual card Config 1	Dual card Config 2
Slot 1 (x8)	X	
Slot 3 (x8)		
Slot 4 (x8)	X	X
Slot 5 (x0)		
Slot 7 (x8)		X
Monitor connect	Slot 4	Slot 3

PCIe Add-in-Card Slot Lane Assignments

Table 20. PCI-Express Add-in-Card slot lane assignments

i7-7820X and i7-7800X	Triple card Config 1
Slot 1 (x8)	X
Slot 3 (x8)	
Slot 4 (x8)	X
Slot 5 (x0)	
Slot 7 (x8)	X
Monitor connect	Slot 4

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 21. Alienware products and online self-help resources

Information about Alienware products and services

www.alienware.com

Dell Help & Support app



Get started app



Get started app

Accessing help

In Windows search, type **Help and Support**, and press **Enter**.

Online help for operating system

www.dell.com/support/windows

www.dell.com/support/linux

Troubleshooting information, user manuals, setup instructions, product specifications, technical help blogs, drivers, software updates, and so on

www.alienware.com/gamingservices

VR Support

www.dell.com/VRsupport

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.