Alienware Area-51 R3 Threadripper Edition Setup and Specifications

Computer Model: Alienware Area-51 R3 Regulatory Model: D03X Regulatory Type: D03X003

ALIENWARE 🗣

Notes, cautions, and warnings





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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Contents

Set up your computer	5
Setting up the Virtual Reality (VR) headset optional	
Views	9
Front	9
Back	11
Back panel	13
Specifications	15
Dimensions and weight	15
Computer model	15
System information	15
Memory	16
Ports and connectors	16
Communications	17
Wireless module	17
Audio	17
Video	
Storage	18
Power ratings	19
Computer environment	19

PCI-Express graphics card installation matrix......21

Getting help and contacting Alienware	22
Self-help resources	
Contacting Alienware	22

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 1 is the primary graphics card.

Connect the power cable. 4



Press the power button.



Setting up the Virtual Reality (VR) headset — optional

- 1 Download and run the setup tools for your VR headset at <u>www.dell.com/</u><u>VRsupport</u>.
- 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.



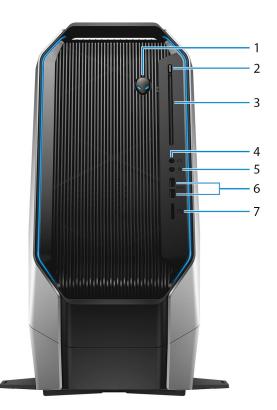


NOTE: Connect the headset to the HDMI port on the discrete graphics card and connect the display to any available port on the card.

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

Views

Front



Power button (Alienhead) 1

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.

- 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.

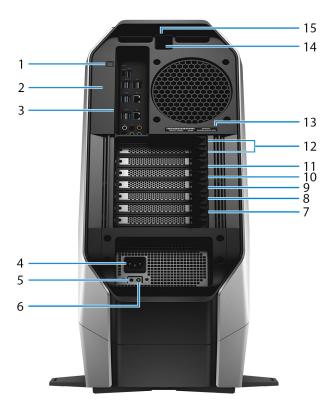
6 USB 3.1 Gen 1 ports (2)

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



- 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 1 will be the primary graphics card.

PCI-Express slot 6 8

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 X16 card such as graphics, audio, or network card to enhance the capabilities of your computer.

NOTE: If you have two graphics cards, slot 1 will be the primary graphics card.

PCI-Express (graphics) slot 4 10

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

11 PCI-Express slot 3

Connect a PCI-Express X16 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 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.

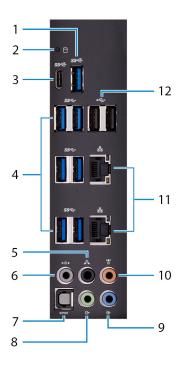
14 Security-cable slot (for Kensington locks)

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



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

Width

Depth

Weight (maximum)

569.98 mm (22.44 in) 638.98 mm (25.15 in) 272.71 mm (10.73 in) 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 R3

System information

Table 3. System information

Processor

Chipset

AMD Ryzen Threadripper AMD X399

Memory

Table 4. Memory specifications

Slots	Four internally-accessible DDR4 DIMM sockets
Туре	DDR4
Speed	2133 MHz, 2400 MHz, 2666 MHz, and 2933 MHz
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	 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	 Four audio output/headphone ports One audio input/microphone port One optical S/PDIF port
Media-card reader	One 9-in-1 card slot

lable 0. Internal ports and connectors	
Internal	
M2	 One M.2 card slot for WLAN and Bluetooth One M.2 card slot for 2280 solid- state drive
Storage	Six SATA ports
Communications	
Table 7. Supported communications	
Ethernet	10/100/1000 Mbps Ethernet controller integrated on system board
Wireless	Wi-Fi 802.11acBluetooth 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	64-bit and 128-bit WEPTKIPAES-CCMP
Audio	
Table 9. Audio specifications	

Table 6. Internal ports and connectors

Realtek ALC3861

Туре

Controller

Integrated 7.1 channel •

 High Definition Audio with S/PDIF support

Video

Table 10. Video specifications

Туре

Controller

Up to three PCI-Express, single/ double-width, full length graphics card

- Single AMD
- Single NVIDIA
- Dual/Triple AMD (CrossFire)
- Dual NVIDIA (SLI)
- NOTE: The graphics configuration of your desktop varies depending on the power supply and graphics card configuration ordered.
- NOTE: Install either NVIDIA or AMD graphics card, when using with dual and triple graphics configurations.

Storage

Table 11. Storage specifications

Externally accessible

Internally accessible

- One 5.25-inch drive bay for DVD +/-RW, Blu-ray Disc combo (optional)
- Blu-ray Disc writer (optional)
- 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 five hard drives support

Power ratings

Table 12. Power ratings

	-		
Туре	850W	1500 W	1500 W
Input voltage	100 VA	C-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	+12 VB/48 A,	+5 V/25 A, +12 VA/32 A, +12 VC/48 A, +12 VD/16 /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		+12 VA, +12 VB, +12 VC, ′D, -12 V, +5 Vaux
Temperature ra	inge		
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

Feature	850 W PSU/1500 W PSU	
	Two graphics card	Three graphics card
Slot 1	x	l6 [*]
Slot 2	Ν	IA
Slot 3	x8	
Slot 4	x16 [*]	
Slot 5	NA	
Slot 6	х	:4
Slot 7	x8	x8 *
Maximum total TDP watts	360 W,	/900 W

The following table provides the PCI-Express graphics card installation matrix. Table 14. PCI-Express graphics card installation matrix

* Recommended location

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 15. Alienware products and online self-help resources

Information about Alienware products <u>www.alienware.com</u> and services

Dell Help & Support app

Get started app

Accessing help

Online help for operating system

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

VR Support

Videos providing step-by-step instructions to service your computer

Contacting Alienware

Get started app **Second** In Windows search, type **Help and Support**, and press **Enter**.

www.dell.com/support/windows www.dell.com/support/linux

www.alienware.com/gamingservices

www.dell.com/VRsupport www.youtube.com/alienwareservices

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



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.