Alienware 17 R5 Setup and Specifications

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

Connect the power adapter and press the power button.



Set up the Virtual Reality (VR) headset—optional

- NOTE: The VR headset is sold separately.
- NOTE: If you are using Alienware Graphics Amplifier with your computer, see Alienware Graphics Amplifier.

HTC Vive

- 1 Download and run the setup tools for your VR headset at <u>www.dell.com/VRsupport</u>.
- 2 Connect the HDMI cable of the HTC Vive headset to the back of your computer.

- 3 Connect the USB cable from the Vive hub to the USB 3.1 Gen 1 port at the right side of your computer.
- 4 Follow the on-screen instructions to complete the setup.

Oculus Rift

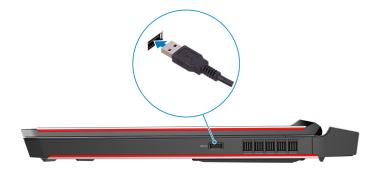


NOTE: The USB dongles are only shipped with computers that are Oculus certified.

- 1 Download and run the setup tools for your VR headset at <u>www.dell.com/VRsupport</u>.
- 2 Connect the HDMI cable of the Oculus Rift headset to the back of your computer.



3 Connect the Oculus Rift headset to the USB Type-A port at the right side of your computer.



4 Connect the Oculus Rift tracker to the USB Type-A port at the left side of your computer.



5 Connect a USB Type-C to Type-A dongle to the Thunderbolt 3 (USB Type-C) port at the back of your computer.



 $oldsymbol{6}$ Connect the XBOX controller to the USB Type-A port on the USB dongle.



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

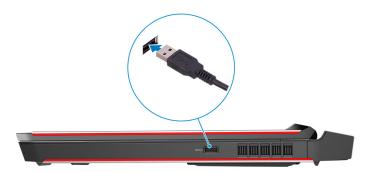
Oculus Rift with touch

NOTE: The USB dongles are only shipped with computers that are Oculus certified.

- 1 Download and run the setup tools for your VR headset at www.dell.com/VRsupport.
- 2 Connect the HDMI cable of the Oculus Rift headset to the back of your computer.



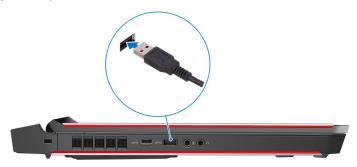
3 Connect the Oculus Rift headset to the USB Type-A port at the right side of your computer.



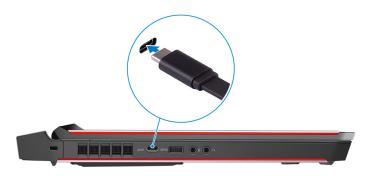
4 Connect a USB Type-C to Type-A dongle to the Thunderbolt 3 (USB Type-C) port on the back of your computer.



5 Connect the Oculus Rift tracker to the USB Type-A port at the left side of your computer.



6 Connect a USB Type-C to Type-A dongle to the USB 3.1 Gen 2 (Type-C) port at the left side of your computer.



7 Connect the XBOX controller to the USB Type-A port on the USB dongle.



8 Connect the Oculus Rift tracker for Touch to the USB Type-A port on the dongle.



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

Alienware Graphics Amplifier

Alienware Graphics Amplifier enables you to connect an external graphics card to your computer.

When using the Virtual Reality (VR) headset, connect the HDMI cable to the graphics card installed on your Alienware Graphics Amplifier. The USB cables from the VR headset can be connected either to your computer or your Alienware Graphics Amplifier.



NOTE: The USB dongle is not required, if you are connecting the USB 3.1 Gen 1 cables on your VR headset to the USB 3.1 Gen 1 Type-A port on your Alienware Graphics Amplifier.

For more information about Alienware Graphics Amplifier, see *Alienware Graphics Amplifier User's Guide* at www.dell.com/support.

Views

Base



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 Macro keys

Run pre-defined Macros.

Define the macro keys using the Alienware Command Center.

Display



1 Left microphone

Provides digital sound input for audio recording and voice calls.

2 Camera

Enables you to video chat, capture photos, and record videos.

3 Camera-status light

Turns on when the camera is in use.

4 Right microphone

Provides digital sound input for audio recording and voice calls.

5 Tobii Eye Tracker

Application that enables you to interact with your computer using your eyes.

6 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.

Front



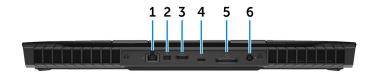
l Left speaker

Provides audio output.

2 Right speaker

Provides audio output.

Back



Network port (with lights)

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.

2 Mini DisplayPort

Connect a TV or another DisplayPort-in enabled device. Provides video and audio output.

3 HDMI port

Connect a TV or another HDMI-in enabled device. Provides video and audio output.

4 Thunderbolt 3 (USB Type-C) port

Supports USB 3.1 Gen 2, DisplayPort 1.2, Thunderbolt 3 and also enables you to connect to an external display using a display adapter.

Provides data transfer rates up to 10 Gbps for USB 3.1 Gen 2 and up to 40 Gbps for Thunderbolt 3.

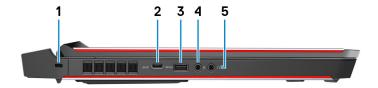
5 External graphics port

Connect an Alienware Graphics Amplifier to enhance the graphics performance.

6 Power-adapter port

Connect a power adapter to provide power to your computer and charge the battery.

Left

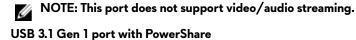


1 Security-cable slot (for Noble locks)

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

2 USB 3.1 Gen 2 (Type-C) port

Connect to external storage devices. Provides data transfer speeds up to 10 Gbps.



Connect peripherals such as external storage devices and printers.

Provides data transfer speeds up to 5 Gbps. PowerShare enables you to charge your USB devices even when your computer is turned off.



3

NOTE: If the charge on your computer's battery is less than 10 percent, you must connect the power adapter to charge your computer, and USB devices connected to the PowerShare port.

- NOTE: If a USB device is connected to the PowerShare port before the computer is turned off or in hibernate state, you must disconnect and connect it again to enable charging.
- NOTE: Certain USB devices may not charge when the computer is turned off or in sleep state. In such cases, turn on the computer to charge the device.

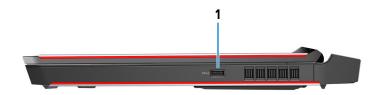
4 Microphone/headphone port (configurable)

Connect an external microphone for sound input or headphones for sound output.

5 Headset port

Connect headphones or a headset (headphone and microphone combo).

Right



USB 3.1 Gen 1 port

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

Specifications

Computer model

Alienware 17 R5

System information

Table 1. System information

Processor 8th generation Intel Core i7/i9

Chipset Intel CM246

Operating system

Table 2. Operating system

Operating systems supported • Windows 10 Home (64-bit)

Windows 10 Professional (64-bit)

Dimensions and weight

Table 3. Dimensions and weight

 Height
 29.99 mm (1.18 in)

 Width
 424 mm (16.69 in)

 Depth
 332 mm (13.07 in)

 Weight
 4.42 kg (9.74 lb)



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

Memory

Table 4. Memory specifications

Slots Two SODIMM slots

Type DDR4

Speed 2666 MHz

Configurations supported:

Per memory module slot 4 GB, 8 GB, and 16 GB

Total memory 8 GB, 16 GB, and 32 GB

Ports and connectors

Table 5. Ports and connectors

External:	
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Network One RJ-45 port

USB • One USB 3.1 Gen 2 (Type-C) port

• One USB 3.1 Gen 1 port with

PowerShare

One USB 3.1 Gen 1 port

Thunderbolt 3 (USB Type-C) port

Audio/Video • One HDMI 2.0 port

One microphone/headphone port

(configurable)

One headset port

One Mini DisplayPort 1.3

One external graphics port

Internal:

M.2 card

• Three M.2 card slots for solid-state

drive (SATA/PCIe)

 One M.2 card slot for Wi-Fi and Bluetooth combo card

Communications

Table 6. Communications specifications

Ethernet 10/100/1000 Mbps Ethernet

controller integrated on system board

Wireless • Wi-Fi 802.11ac

Bluetooth 4.1

Wireless module

Table 7. Wireless module specifications

Transfer rate Up to 1733 Mbps

Frequency bands supported Dual band 2.4 GHz/5 GHz

Encryption • WEP

WPA

EAP

WPS

PMF

TKIP

Audio

Table 8. Audio specifications

Controller Realtek ALC3266

Speakers Stereo

Speaker output • Average: 4 W

Peak: 5 W

Subwoofer output

• Average: 2 W

• Peak: 2.5 W

Microphone Digital-array microphones

Storage

Your computer supports one hard drive and three solid-state drives. Table 9. Storage specifications

Storage type	Interface type	Capacity
One 2.5-inch hard drive	SATA AHCI 6 Gbps	Up to 1 TB
One M.2 2242 solid-state drive One M.2 2280 solid-state drive	SATA AHCI 6 GbpsPCle NVMe up to 32 Gbps	Up to 1 TB
One M.2 2280 solid-state drive	PCIe NVMe up to 32 Gbps	Up to 1 TB

Intel Optane storage

Table 10. Intel Optane storage

Interface	PCle 3.0x2
Connector	M.2 2280
Configurations supported	60 GB and 120 GB
Capacity	Up to 120 GB

Keyboard

Table 11. Keyboard specifications

Туре	RGB Backlit keyboardRGB per Key keyboard
Shortcut keys	Some keys on your keyboard have two symbols on them. These keys can be

used to type alternate characters or to perform secondary functions. To type the alternate character, press Shift and the desired key. To perform secondary functions, press Fn and the desired key.



NOTE: You can define the primary behavior of the function keys (F1-F12) by changing Function Key Behavior in BIOS setup program.

Keyboard shortcuts

Camera

Table 12. Camera specifications

Resolution

Still image: 2.07 megapixels

Video: 1920 x 1080 (Full HD) at

30 fps (maximum)

Diagonal viewing angle

74 degrees

Touchpad

Table 13. Touchpad specifications

Resolution

Horizontal: 1727 Vertical: 1092

Dimensions

Height: 56 mm (2.20 in)

Width: 100 mm (3.94 in)

Touchpad gestures

For more information about touchpad gestures for Windows 10, see the Microsoft knowledge base article 4027871 at support.microsoft.com.

Battery

Table 14. Battery specifications

	4-cell "smart" lithium- ion (68 WHr)	6-cell "smart" lithium- ion (99 WHr)
Weight (maximum)	0.33 kg (0.72 lb)	0.43 kg (0.94 lb)
Voltage	15.20 VDC	11.40 VDC
Dimensions:		
Height	13.50 mi	m (0.53 in)
Width	259.60 mm (10.22 in)	
Depth	89.20 mm (3.51 in)	
Temperature range:		
Operating	0°C to 35°C (32°F to 95°F)	
Storage	-20°C to 60°C (-4°F to 140°F)	
Life span (approximate)	300 discharge/charge cycles	
Coin-cell battery	CR-2032	
Operating time	Varies depending on operating conditions and can significantly reduce under certain power-intensive conditions.	

Video

Table 15. Video specifications

	Integrated	Discrete
Controller	Intel UHD Graphics 630	 AMD Radeon RX570 NVIDIA GeForce GTX 1060 NVIDIA GeForce GTX 1070 NVIDIA GeForce GTX 1080

	Integrated	Discrete
		NOTE: The NVIDIA graphics cards support G-Sync panels.
Memory	Shared system memory	• 6 GB GDDR5
		 8 GB GDDR5
		 8 GB GDDR5X

Power adapter

Table 16. Power adapter specifications

	180 W	240 W	330 W	
Input current (maximum)	2.34 A	3.50 A	4.40 A	
Output current (continuous)	9.23 A	12.31 A	16.92 A	
Diameter (connector)		7.40 mm		
Input voltage		100 VAC-240 V	AC	
Input frequency		50 Hz-60 Hz		
Rated output voltage		19.50 VDC		
Temperature range:				
Operating		0°C to 40°C (32°F to	104°F)	
Storage		–40°C to 70°C (–40°F	to 158°F)	

Display

Table 17. Display specifications

	17.3-inch FHD Anti-Glare panel	17.3-inch QHD Anti-Glare panel	17.3-inch UHD Anti-Glare panel
Resolution (maximum)	1920 x 1080	2560 x 1440	3840 x 2160
Operating angle	140 degrees	140 degrees	140 degrees
Pixel pitch	0.1989 mm	0.14925 mm	0.0995 mm
Dimensions: (excluding bezel)			
Height	214.81 mm (8.46 in)	214.92 mm (8.46 in)	214.94 mm (8.46 in)
Width	381.89 mm (15.04 in)	382.08 mm (15.04 in)	382.12 mm (15.04 in)
Diagonal	438.16 mm (17.25 in)	438.38 mm (17.26 in)	438.42 mm (17.26 in)
Refresh rate	60 Hz	120 Hz	60 Hz
G-sync support	Yes (optional)	Yes	Yes
Tobii Eye-tracking support	No	Yes	Yes
Panel technology	In-plane switching	In-plane switching	In-plane switching
Controls	Brightness can be controlled using shortcut keys		

Computer environment

Airborne contaminant level: G2 or lower as defined by ISA-S71.04-1985 **Table 18. Computer environment**

	Operating	Storage
Temperature range	0°C to 35°C	-40°C to 65°C

	Operating	Storage
	(32°F to 95°F)	(-40°F to 149°F)
Relative humidity (maximum)	10% to 90% (non-condensing)	5% to 95% (non-condensing)
Vibration (maximum)	0.66 GRMS	1.30 GRMS
Shock (maximum)*	110 G [†]	160 G‡
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.

 $[\]dagger$ Measured using a 2 ms half-sine pulse when the hard drive is in use.

[‡] Measured using a 2 ms half-sine pulse when the hard-drive head is in parked position.

Keyboard shortcuts



NOTE: Keyboard characters may differ depending on the keyboard language configuration. Keys used for shortcuts remain the same across all language configurations.

Table 19. List of keyboard shortcuts

Keys	Description
FN + F1	Disconnect Alienware Graphics Amplifier
FN + F2	Disable/enable wireless
FN F3	Mute audio
FN + F⁴	Decrease volume
FN + F5 €	Increase volume
FN + F8 □□	Switch to external display
+ (F9)	Decrease brightness
+ (F10 o.)	Increase brightness
FN + FN T-PAD	Disable/enable touchpad
FN + FIZ	Disable/enable AlienFX

Table 20. List of Macro keys

Keys	Description
A_1	Macro keys

Keys	Description
Js	
E/.	
74	
_1/2	
$\left[\mathcal{J}_{Q}\right]$	NOTE: You can configure modes and assign multiple tasks for the macro keys on the keyboard.
$^{J_{\Delta}}$	
(-) ⁸	
(¹ / ₉	
2×	

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



Tips



Contact Support

In Windows search, type **Contact 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.