


Alienware m15 Ryzen Edition 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 Alienware m15 Ryzen Edition R5

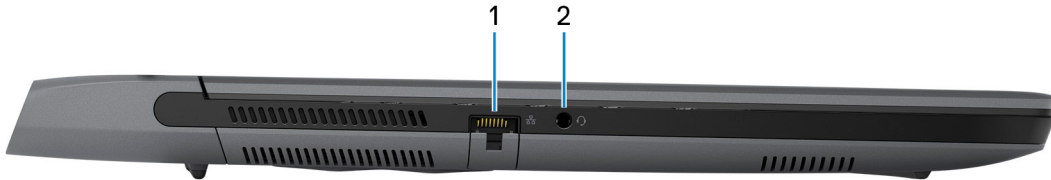
NOTE: The images in this document may differ from your computer depending on the configuration you ordered.

Connect the power adapter and press the power button.



Views of Alienware m15 Ryzen Edition R5

Left



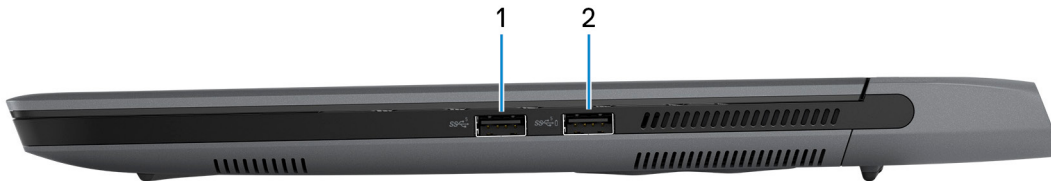
1. RJ45 Ethernet port

Connect an Ethernet (RJ45) cable from a router or a broadband modem for network or Internet access. The two lights of the connector indicate the connectivity status and network activity.

2. Headset (headphone and microphone combo) port

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

Right



1. USB 3.2 Gen 1 port

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

2. USB 3.2 Gen 1 port with PowerShare

Connect devices 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.

NOTE: If your computer is turned off or in hibernate state, you must connect the power adapter to charge your devices using the PowerShare port. You must enable this feature in the BIOS setup program.

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.

Top



1. Multi-touch gesture-enabled precision touchpad

Move your finger on the touchpad to move the mouse pointer. Tap to left-click and two fingers tap to right-click.

2. Left-click area

Press to left-click.

3. Right-click area

Press to right-click.

4. Power button (Alien head)

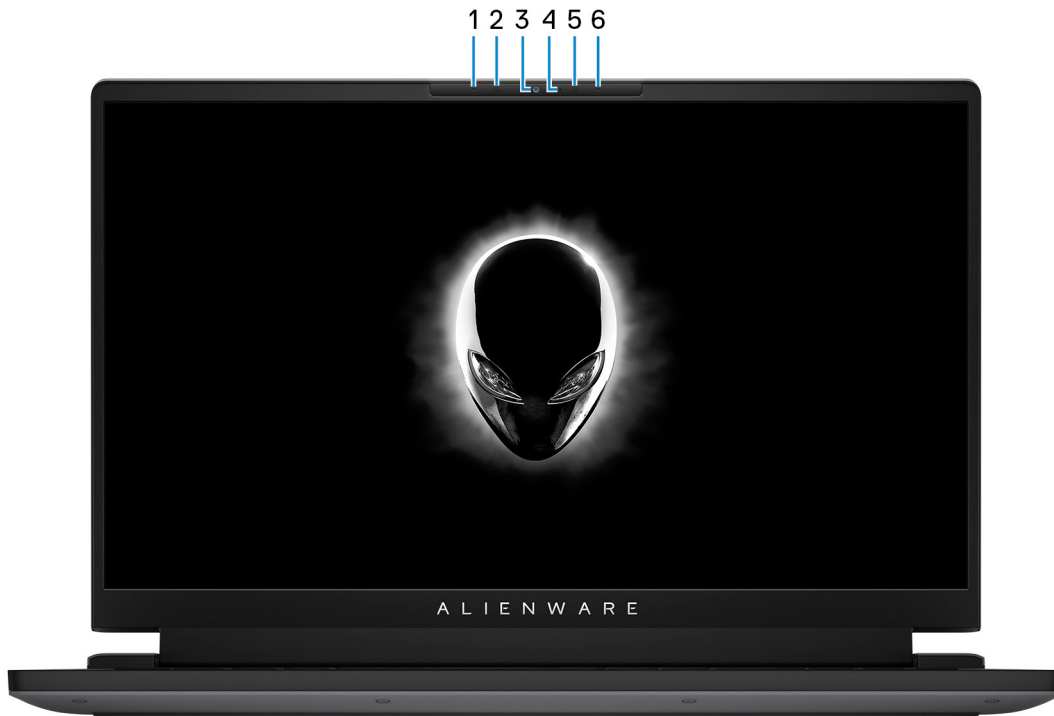
Press to turn on the computer if it is turned off, in sleep state, or in hibernate state.

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

When the computer is turned on, press the power button to put the computer into sleep state; press and hold the power button for 10 seconds to force shut-down the computer.

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

Front



1. Left microphone

Provides digital sound input for audio recording and voice calls.

2. Infrared emitter (optional)

Emits infrared light, which enables the infrared camera to sense and track motion.

3. RGB-infrared camera (optional)

This combined camera supports both infrared Windows Hello facial recognition and standard RGB imaging for photos and videos.

NOTE: The device will also ship with a HD RGB camera that enables you to video chat, capture photos, and record videos. For this configuration, the infrared emitters will not be featured in the camera module.

4. Camera-status light

Turns on when the camera is in use.

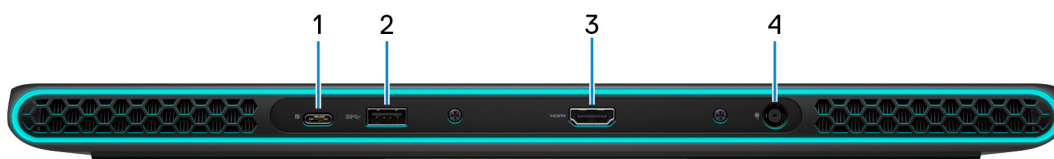
5. Infrared emitter (optional)

Emits infrared light, which enables the infrared camera to sense and track motion.

6. Right microphone

Provides digital sound input for audio recording and voice calls.

Back



1. USB 3.2 Gen 2 Type-C port with DisplayPort

Connect devices such as external storage devices, printers, and external displays. Provides data transfer rate of up to 10 Gbps. Supports DisplayPort 1.4 and also enables you to connect an external display using a display adapter.

(i) NOTE: A USB Type-C to DisplayPort adapter (sold separately) is required to connect a DisplayPort device.

2. USB 3.2 Gen 1 port

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

3. HDMI port

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

4. Power-adapter port

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

Bottom



1. Left speaker

Provides audio output.

2. 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.

3. Right speaker

Provides audio output.

Specifications of Alienware m15 Ryzen Edition R5

Dimensions and weight

The following table lists the height, width, depth, and weight of your Alienware m15 Ryzen Edition R5.

Table 1. Dimensions and weight

Description	Values
Height:	
Front height	12.90 mm (0.51 in.)
Rear height	19.20 mm (0.76 in.)
Width	356.20 mm (14.02 in.)
Depth	272.50 mm (10.73 in.)
Weight ① NOTE: The weight of your computer depends on the configuration ordered and manufacturing variability.	2.69 kg (5.93 lbs) ① NOTE: This is the maximum weight of the device.

Processor

The following table lists the details of the processors supported by your Alienware m15 Ryzen Edition R5.

Table 2. Processor

Description	Option one	Option two
Processor type	AMD Ryzen 7 5800H	AMD Ryzen 9 5900HX
Processor wattage	45 W	45 W
Processor core count	8	8
Processor thread count	16	16
Processor speed	Up to 4.40 GHz	Up to 4.60 GHz
Processor cache	16 MB	16 MB
Integrated graphics	AMD Radeon Graphics	AMD Radeon Graphics

Chipset

The following table lists the details of the chipset supported by your Alienware m15 Ryzen Edition R5.

Table 3. Chipset

Description	Values
Chipset	Integrated in the processor

Table 3. Chipset (continued)

Description	Values
Processor	AMD Ryzen 7 5800H/AMD Ryzen 9 5900HX
DRAM bus width	128-bit
Flash EPROM	16 MB
PCIe bus	Up to Gen3

Operating system

Your Alienware m15 Ryzen Edition R5 supports the following operating systems:

- Windows 10 Home (64-bit)
- Windows 10 Pro (64-bit)

Memory

The following table lists the memory specifications of your Alienware m15 Ryzen Edition R5.

Table 4. Memory specifications

Description	Values
Memory slots	Two SoDIMM slots
Memory type	DDR4
Memory speed	3200 MHz
Maximum memory configuration	32 GB
Minimum memory configuration	8 GB
Memory size per slot	4 GB, 8 GB, and 16 GB
Memory configurations supported	<ul style="list-style-type: none"> • 8 GB, 1 x 8 GB, DDR4, 3200 MHz • 8 GB, 2 x 4 GB, DDR4, 3200 MHz, dual-channel • 16 GB, 2 x 8 GB, DDR4, 3200 MHz, dual-channel • 32 GB, 2 x 16 GB, DDR4, 3200 MHz, dual-channel

External ports

The following table lists the external ports of your Alienware m15 Ryzen Edition R5.

Table 5. External ports

Description	Values
Network port	One RJ-45
USB ports	<ul style="list-style-type: none"> • Two USB 3.2 Gen 1 ports • One USB 3.2 Gen 1 port with PowerShare • One USB 3.2 Gen 2 Type-C port with DisplayPort

Table 5. External ports (continued)

Description	Values
	<p>NOTE: You can connect a Dell Docking Station to this port. For more information, see the knowledge base article SLN286158 at www.dell.com/support.</p>
Audio port	One headset (headphone and microphone combo) port
Video port	One HDMI 2.1 port
Media-card reader	Not supported
Power-adapter port	7.4 mm barrel
Security-cable slot	Not supported

Internal slots

The following table lists the internal slots of your Alienware m15 Ryzen Edition R5.

Table 6. Internal slots

Description	Values
M.2	<ul style="list-style-type: none"> Two M.2 2230/2280 slots for solid-state drives <p>NOTE: To learn more about the features of different types of M.2 cards, see the knowledge base article 000144170 at www.dell.com/support.</p>

Ethernet

The following table lists the wired Ethernet Local Area Network (LAN) specifications of your Alienware m15 Ryzen Edition R5.

Table 7. Ethernet specifications

Description	Values
Model number	Ethernet controller integrated to the system board
Transfer rate	10/100/1000/2500 Mbps

Wireless module

The following table lists the Wireless Local Area Network (WLAN) module supported on your Alienware m15 Ryzen Edition R5.

Table 8. Wireless module specifications

Description	Values
Model number	Killer 1650x
Transfer rate	Up to 2400 Mbps
Frequency bands supported	2.4 GHz/5 GHz

Table 8. Wireless module specifications (continued)

Description	Values
Wireless standards	<ul style="list-style-type: none"> • WiFi 802.11a/b/g • Wi-Fi 4 (WiFi 802.11n) • Wi-Fi 5 (WiFi 802.11ac) • Wi-Fi 6 (WiFi 802.11ax)
Encryption	<ul style="list-style-type: none"> • 64-bit/128-bit WEP • AES-CCMP • TKIP
Bluetooth	Bluetooth 5.0

Audio

The following table lists the audio specifications of your Alienware m15 Ryzen Edition R5.

Table 9. Audio specifications

Description	Values	
Audio controller	Realtek ALC3254 with A-Volute Nahimic audio processing software – Integrated in Alienware Sound Center (AWSC)	
Stereo conversion	Supported	
Internal audio interface	High-definition audio interface	
External audio interface	One headset (headphone and microphone combo) port	
Number of speakers	Two	
Internal-speaker amplifier	Supported	
External volume controls	Keyboard shortcut controls	
Speaker output:		
	Average speaker output	2 W per channel
	Peak speaker output	2.5 W per channel
Subwoofer output	Not supported	
Microphone	Dual-array microphone	

Storage

This section lists the storage options on your Alienware m15 Ryzen Edition R5.

Your Alienware m15 Ryzen Edition R5 supports one of the following storage configurations:

- One M.2 solid-state drive
- Two M.2 solid-state drives

The primary drive of your Alienware m15 Ryzen Edition R5 varies with the storage configuration. For computers:

- with a M.2 drive, the M.2 drive is the primary drive
- with two M.2 drives, one of the M.2 drives is the primary drive

Table 10. Storage specifications

Storage type	Interface type	Capacity
One M.2 2230 solid-state drive	PCIe Gen3 x4 NVMe, up to 32 Gbps	Up to 512 GB
One M.2 2280 solid-state drive	PCIe Gen4 x4 NVMe, up to 32 Gbps <i>i</i> NOTE: The performance of the PCIe NVMe Gen4 x4 will be limited to PCIe Gen3 x4 bandwidth on the system.	Up to 2 TB

Keyboard

The following table lists the keyboard specifications of your Alienware m15 Ryzen Edition R5.

Table 11. Keyboard specifications

Description	Values
Keyboard type	<ul style="list-style-type: none"> 4-zone RGB backlit rubber dome keyboard RGB per key backlit Cherry mechanical keyboard
Keyboard layout	QWERTY
Number of keys	<ul style="list-style-type: none"> United States and Canada: 85 keys United Kingdom: 86 keys Japan: 89 keys
Keyboard size	X=19.05 mm key pitch Y=19.05 mm key pitch
Keyboard shortcuts	<p>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.</p> <p><i>i</i> NOTE: You can define the primary behavior of the function keys (F1–F12) changing Function Key Behavior in BIOS setup program.</p> <p>For more information, see keyboard shortcuts. Keyboard shortcuts</p>

Camera

The following table lists the camera specifications of your Alienware m15 Ryzen Edition R5.

Table 12. Camera specifications

Description	Values
Number of cameras	One
Camera type	<ul style="list-style-type: none"> HD RGB camera RGB-IR camera (optional)
Camera location	Front

Table 12. Camera specifications (continued)

Description		Values
Camera sensor type		CMOS sensor technology
Camera resolution:		
	Still image	0.92 megapixel
	Video	1280 x 720 (HD) at 30 fps
Infrared camera resolution:		
	Still image	0.23 megapixel
	Video	640 x 360 (HD) at 30 fps
Diagonal viewing angle:		
	Camera	74.9 degrees
	Infrared camera	75.8 degrees

Touchpad

The following table lists the touchpad specifications of your Alienware m15 Ryzen Edition R5.

Table 13. Touchpad specifications

Description		Values
Touchpad resolution:		
	Horizontal	1217
	Vertical	168
Touchpad dimensions:		
	Horizontal	105 mm (4.13 in.)
	Vertical	60 mm (2.36 in.)
Touchpad gestures		For more information about touchpad gestures available on Windows 10, see the Microsoft knowledge base article 4027871 at support.microsoft.com .


Power adapter

The following table lists the power adapter specifications of your Alienware m15 Ryzen Edition R5.

Table 14. Power adapter specifications

Description	Option one	Option two
Type	180 W	240 W
Connector dimensions:		
External diameter	7.40 mm	7.40 mm

Table 14. Power adapter specifications (continued)

Description		Option one	Option two
	Internal diameter	5.10 mm	5.10 mm
Input voltage		100 VAC–240 VAC	100 VAC–240 VAC
Input frequency		50 Hz–60 Hz	50 Hz–60 Hz
Input current (maximum)		2.34 A	3.50 A
Output current (continuous)		9.23 A	12.31 A
Rated output voltage		19.50 VDC	19.50 VDC
Temperature range:			
	Operating	0°C to 40°C (32°F to 104°F)	0°C to 40°C (32°F to 104°F)
	Storage	-40°C to 70°C (-40°F to 158°F)	-40°C to 70°C (-40°F to 158°F)
 CAUTION: Operating and storage temperature ranges may differ among components, so operating or storing the device outside these ranges may impact the performance of specific components.			

Battery

The following table lists the battery specifications of your Alienware m15 Ryzen Edition R5.

Table 15. Battery specifications


Description		Option one	Option two
Battery type		3-cell, 56 Wh "smart" lithium-ion	6-cell, 86 Wh "smart" lithium-ion
Battery voltage		13.20 VDC	13.35 VDC
Battery weight (maximum)		0.26 kg (0.57 lb)	0.34 kg (0.75 lb)
Battery dimensions:			
	Height	77.70 mm (3.06 in.)	77.70 mm (3.06 in.)
	Width	295.20 mm (11.62 in.)	295.20 mm (11.62 in.)
	Depth	7.56 mm (0.30 in.)	7.56 mm (0.30 in.)
Temperature range:			
	Operating	0°C to 70°C (32°F to 158°F)	0°C to 70°C (32°F to 158°F)
	Storage	-25°C to 65°C (-4°F to 149°F)	-25°C to 65°C (-4°F to 149°F)
Battery operating time		Varies depending on operating conditions and can significantly reduce under certain power-intensive conditions.	Varies depending on operating conditions and can significantly reduce under certain power-intensive conditions.
Battery charging time (approximate)  NOTE: Control the charging time, duration, start and end time, and so on using the Dell Power Manager		3 hours (when the computer is off)	3 hours (when the computer is off)

Table 15. Battery specifications (continued)

Description	Option one	Option two
application. For more information on the Dell Power Manager see, <i>Me and My Dell</i> on www.dell.com .		
Coin-cell battery	Not supported	Not supported
<p>⚠ CAUTION: Operating and storage temperature ranges may differ among components, so operating or storing the device outside these ranges may impact the performance of specific components.</p> <p>ⓘ NOTE: Dell recommends that you charge the battery regularly for optimal power consumption. If your battery charge is completely depleted, connect the power adapter, turn on your computer, and then restart your computer to reduce the power consumption.</p>		

Display

The following table lists the display specifications of your Alienware m15 Ryzen Edition R5.

Table 16. Display specifications

Description	Option one	Option two	Option three
Display type	Full High Definition	Full High Definition	Quad High Definition
Display-panel technology	Wide-Viewing Angle (WVA)	Wide-Viewing Angle (WVA)	Wide-Viewing Angle (WVA)
Display-panel dimensions (active area):			
Height	193.59 mm (7.62 in.)	193.59 mm (7.62 in.)	193.62 mm (7.62 in.)
Width	344.16 mm (13.55 in.)	344.16 mm (13.55 in.)	344.22 mm (13.55 in.)
Diagonal	394.87 mm (15.55 in.)	394.87 mm (15.55 in.)	394.94 mm (15.55 in.)
Display-panel native resolution	1920 x 1080	1920 x 1080	2560 x 1440
Luminance (typical)	300 nits	300 nits	400 nits
Megapixels	2.07	2.07	3.69
Color gamut	100% sRGB	100% sRGB	DCI-P3 99%
Pixels Per Inch (PPI)	141	141	188
Contrast ratio (typ)	1000:1	1000:1	1000:1
Response time (max)	9 ms	5 ms	9 ms
Refresh rate	165 Hz	360 Hz	240 Hz
Horizontal view angle	+/- 85 degrees	+/- 85 degrees	+/- 85 degrees
Vertical view angle	+/- 85 degrees	+/- 85 degrees	+/- 85 degrees
Pixel pitch	0.18 mm	0.18 mm	0.18 mm
Power consumption (maximum)	6 W	8 W	10 W

Table 16. Display specifications (continued)

Description	Option one	Option two	Option three
Anti-glare vs glossy finish	Anti-glare	Anti-glare	Anti-glare
Touch options	No	No	No

GPU—Integrated

The following table lists the specifications of the integrated Graphics Processing Unit (GPU) supported by your Alienware m15 Ryzen Edition R5.

Table 17. GPU—Integrated

Controller	Memory size	Processor
AMD Radeon Graphics	Shared system memory	AMD Ryzen 7 5800H/AMD Ryzen 9 5900HX

GPU—Discrete

The following table lists the specifications of the discrete Graphics Processing Unit (GPU) supported by your Alienware m15 Ryzen Edition R5.

Table 18. GPU—Discrete


Controller	Memory size	Memory type
NVIDIA GeForce RTX 3050 Ti	4 GB	GDDR6
NVIDIA GeForce RTX 3060	6 GB	GDDR6
NVIDIA GeForce RTX 3070	8 GB	GDDR6

Operating and storage environment

This table lists the operating and storage specifications of your Alienware m15 Ryzen Edition R5.

Airborne contaminant level: G1 as defined by ISA-S71.04-1985

Table 19. Computer environment

Description	Operating	Storage
Temperature range	0°C to 40°C (32°F to 104°F)	-40°C to 65°C (-40°F to 149°F)
Relative humidity (maximum)	50% to 90% (non-condensing)	0% to 95% (non-condensing)
Vibration (maximum)*	0.66 GRMS	1.30 GRMS
Shock (maximum)	140 G†	160 G†
Altitude range	0 m to 3048 m (0 ft to 10000 ft)	0 m to 10668 m (0 ft to 35000 ft)
 CAUTION: Operating and storage temperature ranges may differ among components, so operating or storing the device outside these ranges may impact the performance of specific components.		

* 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.

Low blue light

 **WARNING: Prolonged exposure to blue light from the display may lead to long-term effects such as eye strain, eye fatigue, or damage to the eyes.**

Blue light is a color in the light spectrum which has a short wavelength and high energy. Chronic exposure to blue light, particularly from digital sources, may disrupt sleep patterns and cause long-term effects such as eye strain, eye fatigue, or damage to the eyes.

The display on this computer is designed to minimize blue light and complies with TÜV Rheinland's requirement for low blue light displays.

Low blue light mode is enabled at the factory, so no further configuration is necessary.

To reduce the risk of eye strain, it is also recommended that you:

- Position the display at a comfortable viewing distance between 20 and 28 inches (50 and 70 cm) from your eyes.
- Blink frequently to moisten your eyes, wet your eyes with water, or apply suitable eye drops.
- Look away from your display, and gaze at a distant object at 20 ft (609.60 cm) away for at least 20 seconds during each break.
- Take an extended break for 20 minutes every two hours.

Keyboard shortcuts

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








Some keys on your keyboard have two symbols on them. These keys can be used to type alternate characters or to perform secondary functions. The symbol shown on the lower part of the key refers to the character that is typed out when the key is pressed. If you press shift and the key, the symbol shown on the upper part of the key is typed out. For example, if you press **Shift + 2**, **@** is typed out.

The keys F1-F12 at the top row of the keyboard are function keys for multi-media control, as indicated by the icon at the bottom of the key. Press the function key to invoke the task represented by the icon. For example, pressing F1 mutes the audio (refer to the table below).

However, if the function keys F1-F12 are needed for specific software applications, multi-media functionality can be disabled by pressing **fn + Esc**. Subsequently, multi-media control can be invoked by pressing **fn** and the respective function key. For example, mute audio by pressing **fn + F1**.






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

Table 20. List of keyboard shortcuts

Keys	Description
	Disable/enable Performance Boost
	Adjust keyboard backlight brightness
	Switch to external display
	Disable/enable Bluetooth
	Decrease display brightness
	Increase display brightness
	Disable/enable touchpad





Your computer comes with pre-programmable macro keys that enable you to perform multiple actions with a single key press.

Table 21. List of Macro keys

Keys	Description
	Macro keys NOTE: You can configure modes and assign multiple tasks for the macro keys on the keyboard.
	
	
	
	

Your computer comes with dedicated keys that enable you to control audio features of the computer with a single key press.

Table 22. List of keys to control audio features

Keys	Description
	Mute microphone
	Mute speakers
	Increase volume
	Decrease volume

Alienware Command Center

Alienware Command Center (AWCC) provides a single interface to customize and enhance the gaming experience. The AWCC dashboard displays most recently played or added games, and provides game-specific information, themes, profiles, and access to computer settings. You can quickly access settings such as game-specific profiles and themes, lighting, macros, and audio that are critical to the gaming experience.

AWCC also supports AlienFX 2.0. AlienFX enables you to create, assign, and share game-specific lighting maps to enhance the gaming experience. It also enables you to create your own individual lighting effects and apply them to the computer or attached peripherals. AWCC embeds Peripheral Controls to ensure a unified experience and the ability to link these settings to your computer or game.

AWCC supports the following features:

- FX: Create and manage the AlienFX zones.
- Fusion: Includes the ability to adjust game-specific Power Management, Sound Management, and Thermal Management features.
- Peripheral Management: Enables peripherals to appear in and be managed in Alienware Command Center. Supports key peripheral settings and associates with other functions such as profiles, macros, AlienFX, and game library.



AWCC also supports Sound Management, Thermal Controls, CPU, GPU, Memory (RAM) monitoring. For more information about AWCC, see the *Alienware Command Center Online Help* or the knowledge base article [SLN128904](#) at www.dell.com/support.

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 23. Alienware products and online self-help resources

Self-help resources	Resource location
Information about Alienware products and services	www.alienware.com
My Dell app	
Tips	
Contact Support	In Windows search, type Contact Support , and press Enter .
Online help for operating system	www.dell.com/support/windows
Access top solutions, diagnostics, drivers and downloads, and learn more about your computer through videos, manuals and documents.	Your Alienware computer is uniquely identified by a Service Tag or Express Service Code. To view relevant support resources for your Dell computer, enter the Service Tag or Express Service Code at www.dell.com/support . For more information on how to find the Service Tag for your computer, see Locate the Service Tag on your computer .
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.

- ① **NOTE:** Availability varies by country/region and product, and some services may not be available in your country/region.
- ① **NOTE:** If you do not have an active Internet connection, you can find contact information about your purchase invoice, packing slip, bill, or Dell product catalog.