

Alienware x15 R2

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 x15 R2

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

1. Connect the power adapter and press the power button.



2. Connect the USB Type-C Ethernet dongle to the Thunderbolt 4 port of your computer for wired network (optional).

NOTE: This computer is shipped with a USB Type-C Ethernet dongle.



Views of Alienware x15 R2

Display



1. Left microphone

Provides digital sound input for audio recording and voice calls.

2. RGB-infrared camera

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

i **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.

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.

Right



1. Universal audio jack

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

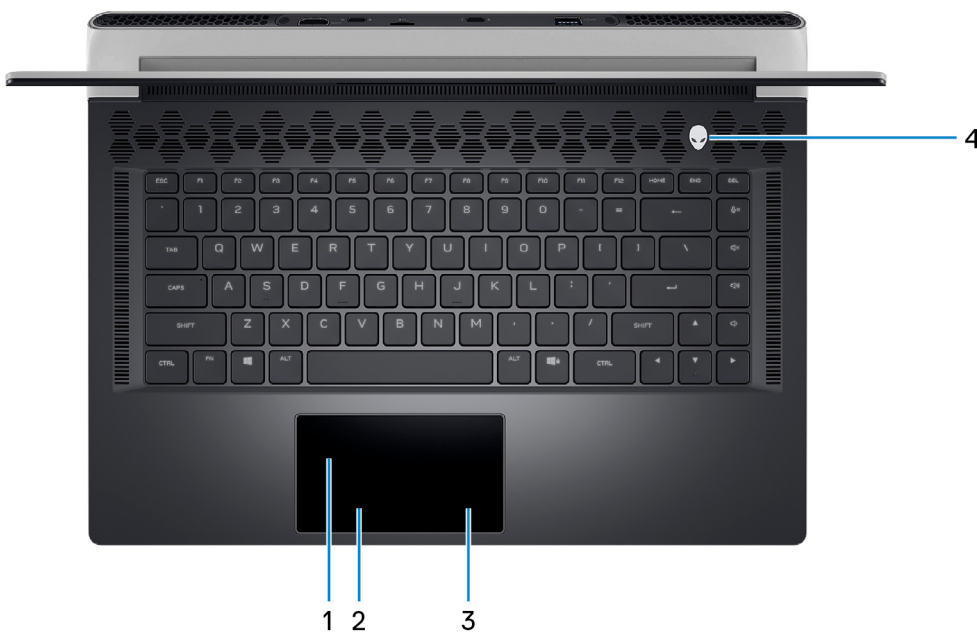
Left



1. Power-adaptor port

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

Top



1. 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 button

Press to left-click.

3. Right-click button

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.

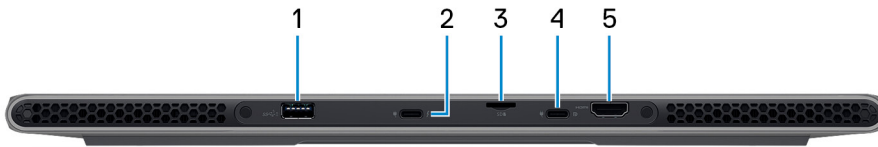
Press to put the computer into sleep state if it is turned on.

When the computer is turned on, press and hold the power button for four seconds to force shut-down the computer.

i NOTE: You can customize power-button behavior in Windows. For more information, see *Me and My Dell* at www.dell.com/support/manuals.

i NOTE: This computer supports AlienFX, which lets you choose from an array of color and transition effects across multiple zones on the computer, including the keyboard and power button. For more information, see [Alienware Command Center](http://www.dell.com/alienware-command-center).

Back



1. 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.

2. Thunderbolt 4.0 port with Power Delivery

Supports USB4, DisplayPort 1.4, Thunderbolt 4 and also enables you to connect to an external display using a display adapter. Provides data transfer rates of up to 40 Gbps for USB4 and Thunderbolt 4.

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

NOTE: USB4 is backward compatible with USB 3.2, USB 2.0, and Thunderbolt 3.

NOTE: Thunderbolt 4 supports two 4K displays or one 8K display.

NOTE: Displays connected through the Thunderbolt port get graphics acceleration only from the integrated graphics and not through your discrete graphics card. For the best gaming performance, connect your display directly through your computer's HDMI port.

3. microSD-card slot

Reads from and writes to the microSD card. The computer supports the following card types:

- microSecure Digital (microSD)
- microSecure Digital High Capacity (microSDHC)
- microSecure Digital Extended Capacity (microSDXC)

4. USB 3.2 Gen 2 Type-C port with DisplayPort 1.4 and Power Delivery

Connect devices such as external storage devices, printers, and external displays.

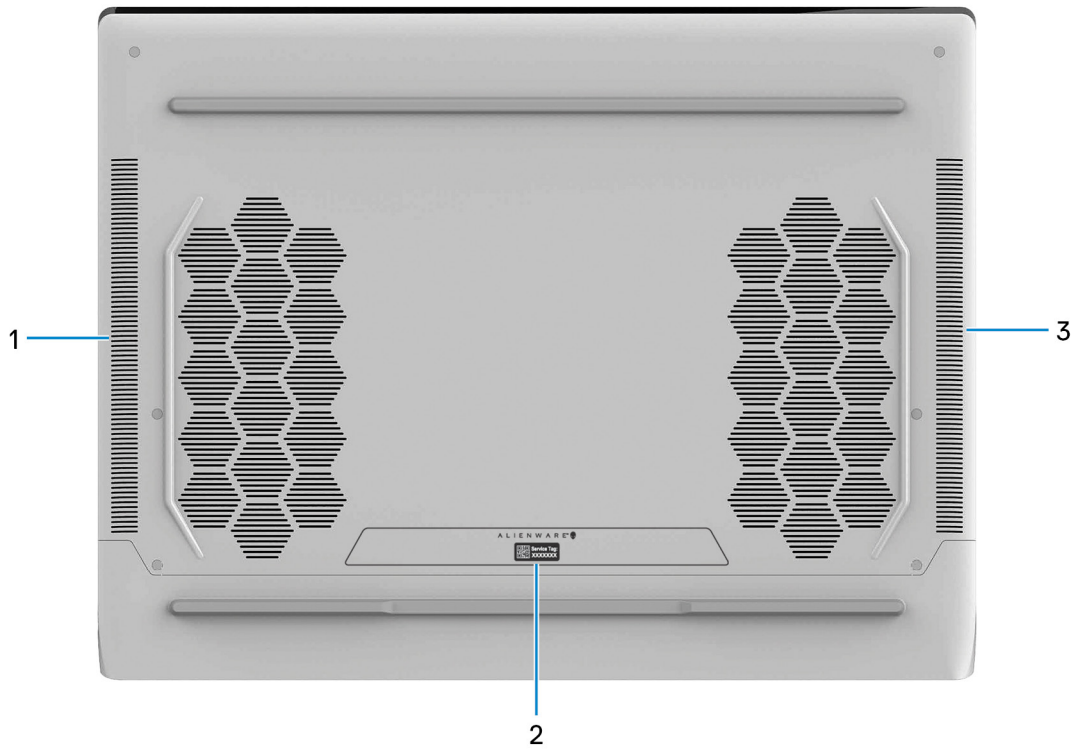
Supports Power Delivery that enables two-way power supply between devices. Provides up to 15 W power output that enables faster charging.

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

5. HDMI 2.1 port

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

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 x15 R2

Dimensions and weight

The following table lists the height, width, depth, and weight of your Alienware x15 R2.

Table 1. Dimensions and weight

Description	Values
Height:	
Front height	12.50 mm (0.50 in.)
Rear height	15.90 mm (0.62 in.)
Width	359.70 mm (14.16 in.)
Depth	277.33 mm (10.91 in.)
Weight  NOTE: The weight of your computer depends on the configuration ordered and manufacturing variability.	2.50 kg (5.51 lb) - maximum

Processor

The following table lists the details of the processors supported by your Alienware x15 R2.

Table 2. Processor

Description	Option one	Option two
Processor type	12 th Generation Intel Core i7-12700H	12 th Generation Intel Core i9-12900H
Processor wattage	45 W	45 W
Processor core count	14	14
Processor thread count	20	20
Processor speed	Up to 4.70 GHz	Up to 5 GHz
Processor cache	24 MB	24 MB
Integrated graphics	Intel Iris X ^e Graphics	Intel Iris X ^e Graphics

Chipset

The following table lists the details of the chipset supported by your Alienware x15 R2.

Table 3. Chipset

Description	Values
Chipset	Integrated in processor
Processor	12 th Generation Intel Core i7/i9

Table 3. Chipset (continued)

Description	Values
DRAM bus width	128-bit
Flash EPROM	32 MB
PCIe bus	Up to Gen4

Operating system

Your Alienware x15 R2 supports the following operating systems:

- Windows 11 Home, 64-bit
- Windows 11 Pro, 64-bit

Memory

The following table lists the memory specifications of your Alienware x15 R2.

Table 4. Memory specifications

Description	Values
Memory slots	Onboard memory
Memory type	LPDDR5
Memory speed	5200 MHz
Maximum memory configuration	32 GB
Minimum memory configuration	16 GB
Memory configurations supported	• 16 GB, LPDDR5, 5200 MHz, dual-channel, integrated • 32 GB, LPDDR5, 5200 MHz, dual-channel, integrated

External ports

The following table lists the external ports of your Alienware x15 R2.

Table 5. External ports

Description	Values
Network port	Not supported
USB ports	• One USB 3.2 Gen 1 port with PowerShare • One USB Type-C 3.2 Gen 2 port with Power Delivery and DisplayPort • One Thunderbolt 4 port with Power Delivery and DisplayPort
Audio port	Universal audio jack
Video port	One HDMI 2.1 port

Table 5. External ports (continued)

Description	Values
Media-card reader	One microSD-card slot
Power-adaptor port	One 7.40 mm x 5.10 mm DC-in
Security-cable slot	Not supported

Internal slots

The following table lists the internal slots of your Alienware x15 R2.

Table 6. Internal slots

Description	Values
M.2	Two M.2 2230/2280 slots for solid-state drive <i>i</i> NOTE: To learn more about the features of different types of M.2 cards, search in the Knowledge Base Resource at www.dell.com/support.

Wireless module

The following table lists the Wireless Local Area Network (WLAN) module supported on your Alienware x15 R2.

Table 7. Wireless module specifications

Description	Values
Model number	Killer AX1675
Transfer rate	Up to 2400 Mbps
Frequency bands supported	2.4 GHz/5 GHz/6 GHz
Wireless standards	• WiFi 802.11a/b/g • Wi-Fi 4 (WiFi 802.11n) • Wi-Fi 5 (WiFi 802.11ac) • Wi-Fi 6 (WiFi 802.11ax)
Encryption	• 64-bit/128-bit WEP • AES-CCMP • TKIP
Bluetooth	Bluetooth 5.2

Audio

The following table lists the audio specifications of your Alienware x15 R2.

Table 8. Audio specifications

Description	Values
Audio controller	Realtek ALC3281

Table 8. Audio specifications (continued)

Description		Values
Stereo conversion		Supported
Internal audio interface		High definition audio interface
External audio interface		Universal audio jack
Number of speakers		2
Internal-speaker amplifier		Not supported
External volume controls		Keyboard shortcut controls
Speaker output:		
	Average speaker output	2 W
	Peak speaker output	2.5 W
Subwoofer output		Not supported
Microphone		Digital-array microphones in camera assembly

Storage

This section lists the storage options on your Alienware x15 R2.

Your Alienware x15 R2 supports one of the following storage configurations:

- One M.2 2230/2280 solid-state drive
- Two M.2 2230/2280 solid-state drives

The primary drive of your Alienware x15 R2 varies with the storage configuration. The primary drive of your computer is the drive where your operating system is installed.

Table 9. Storage specifications

Storage type	Interface type	Capacity
M.2 2230 solid-state drive	PCIe Gen3 x4 NVMe, up to 32 Gbps	Up to 256 GB
M.2 2230 solid-state drive	PCIe Gen4 x4 NVMe, up to 64 Gbps	Up to 256 GB
M.2 2280 solid-state drive	PCIe Gen4 x4 NVMe, up to 64 Gbps	Up to 4 TB

Media-card reader

The following table lists the media cards supported by your Alienware x15 R2.

Table 10. Media-card reader specifications

Description	Values
Media-card type	One microSD-card slot
Media-cards supported	• Micro Secure Digital (microSD) • Micro Secure Digital High Capacity (microSDHC) • Micro Secure Digital Extended Capacity (microSDXC)

Table 10. Media-card reader specifications (continued)

Description	Values
NOTE: The maximum capacity supported by the media-card reader varies depending on the standard of the media card installed in your computer.	

Keyboard

The following table lists the keyboard specifications of your Alienware x15 R2.

Table 11. Keyboard specifications

Description	Values
Keyboard type	RGB per-key backlit keyboard
Keyboard layout	QWERTY
Number of keys	- 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	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) changing Function Key Behavior in BIOS setup program. For more information, see Keyboard shortcuts.

Camera

The following table lists the camera specifications of your Alienware x15 R2.

Table 12. Camera specifications

Description	Values
Number of cameras	One
Camera type	HD RGB-Infrared camera
Camera location	Front
Camera sensor type	CMOS sensor technology
Camera resolution:	
Still image	0.92 megapixel
Video	1280 x 720 (HD) at 30 fps
Infrared camera resolution:	

Table 12. Camera specifications (continued)

Description		Values
	Still image	0.23 megapixel
	Video	640 x 360 at 30 fps
Diagonal viewing angle:		
	Camera	75.80 degrees
	Infrared camera	75.80 degrees

Touchpad

The following table lists the touchpad specifications of your Alienware x15 R2.

Table 13. Touchpad specifications

Description		Values
Touchpad resolution:		
	Horizontal	1217
	Vertical	681
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, see the Microsoft knowledge base article at support.microsoft.com .

Power adapter

The following table lists the power adapter specifications of your Alienware x15 R2.

Table 14. Power adapter specifications

Description		Values
Type		240 W
Connector dimensions:		
	External diameter	7.40 mm (0.30 in.)
	Internal diameter	5.10 mm (0.20 in.)
Input voltage		100 VAC–240 VAC
Input frequency		50 Hz–60 Hz
Input current (maximum)		2.50 A/ 3.50 A/ 5 A
Output current (continuous)		12.31 A

Table 14. Power adapter specifications (continued)

Description		Values
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)
 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 x15 R2.

Table 15. Battery specifications

Description		Values
Battery type		6-cell "smart" lithium ion (87 Wh)
Battery voltage		11.40 VDC
Battery weight (maximum)		0.33 kg (0.73 lb)
Battery dimensions:		
	Height	6.35 mm (0.25 in.)
	Width	309.80 mm (12.20 in.)
	Depth	82 mm (3.23 in.)
Temperature range:		
	Operating	0°C to 50°C (32°F to 122°F)
	Storage	-20°C to 60°C (-4°F to 140°F)
Battery operating time		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 application. For more information on the Dell Power Manager see, <i>Me and My Dell</i> on www.dell.com .		From 0% up to 35% in as little as 20 minutes (ExpressCharge Boost) 2hr (Express charge), 3hr (Standard charge) hours (when the computer is off)
Coin-cell battery		Not supported
 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.		
 CAUTION: 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.		

Display

The following table lists the display specifications of your Alienware x15 R2.

Table 16. Display specifications

Description		Option one	Option two	Option three
Display type		Full High Definition (FHD)	Full High Definition (FHD)	Quad High Definition (QHD)
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.)	344.21 mm (13.55 in.)
	Diagonal	394.87 mm (15.55 in.)	394.87 mm (15.55 in.)	394.93 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		sRGB 100%	sRGB 100%	DCI P3 99%
Pixels Per Inch (PPI)		141	141	188.30
Contrast ratio (typ)		1000:1	1000:1	1000:1
Response time (max)		19 ms	10 ms	19 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	0.13 mm
Power consumption (maximum)		6 W	7.60 W	8.55 W
Anti-glare vs glossy finish		Anti-glare	Anti-glare	Anti-glare
Touch options		No	No	No
Adaptive sync support		None. G-SYNC, Advanced Optimus	G-SYNC, Advanced Optimus	G-SYNC, Advanced Optimus

GPU—Integrated

The following table lists the specifications of the integrated Graphics Processing Unit (GPU) supported by your Alienware x15 R2.

Table 17. GPU—Integrated

Controller	Memory size	Processor
Intel Iris X ^e Graphics	Shared system memory	12 th Generation Intel Core i7/i9

GPU—Discrete

The following table lists the specifications of the discrete Graphics Processing Unit (GPU) supported by your Alienware x15 R2.

Table 18. GPU—Discrete

Controller	Memory size	Memory type
NVIDIA GeForce RTX 3060	6 GB	GDDR6
NVIDIA GeForce RTX 3070 Ti	8 GB	GDDR6
NVIDIA GeForce RTX 3080	16 GB	GDDR6
NVIDIA GeForce RTX 3080 Ti	16 GB	GDDR6

Operating and storage environment

This table lists the operating and storage specifications of your Alienware x15 R2.

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

Table 19. Computer environment

Description	Operating	Storage
Temperature range	0°C to 35°C (32°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)*	0.66 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.

Keyboard shortcuts of Alienware x15 R2

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 Full Speed Mode
	Adjust keyboard backlight brightness
	Switch to external display
	Launch the Windows Connect app to display Bluetooth devices
	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

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.

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.

This computer features the following AlienFX Lighting Zones:

Programmable with up to 16.8 million distinct colors.

 **NOTE:** Information about the location of AlienFX Lighting Zones on your computer is available in AWCC.

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 search in the Knowledge Base Resource 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.