

Alienware x17 R1

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.

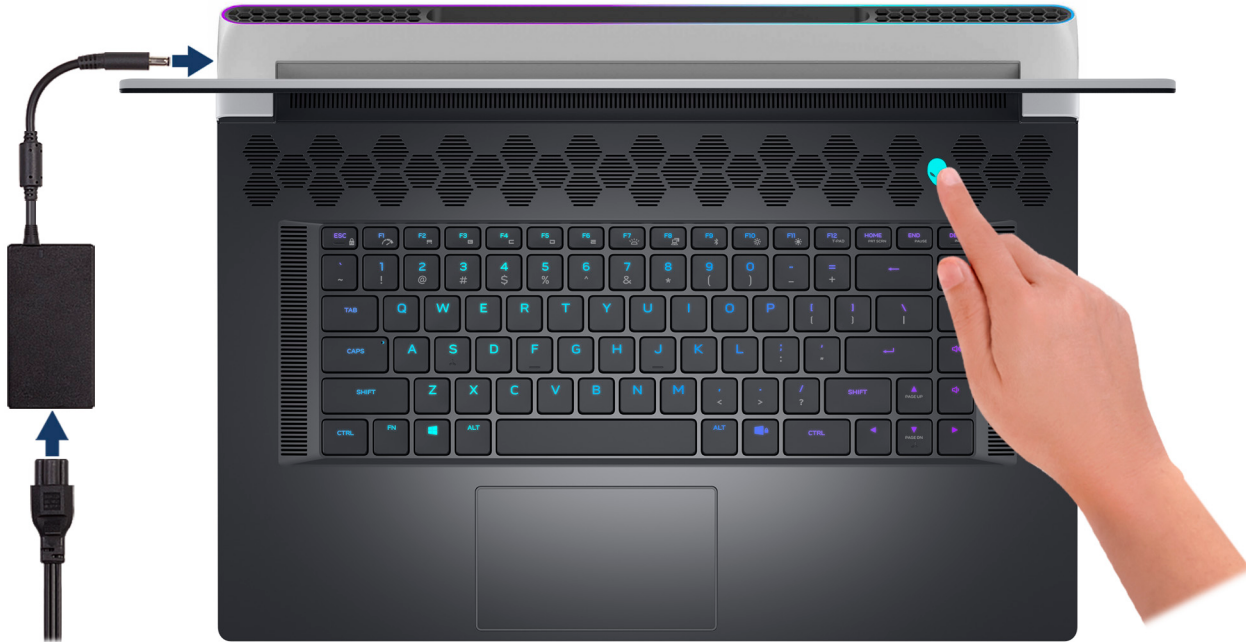
Contents

Chapter 1: Set up your Alienware x17 R1.....	4
Chapter 2: Views of Alienware x17 R1.....	5
Front.....	5
Right.....	6
Left.....	6
Top.....	6
Back.....	7
Bottom.....	8
Chapter 3: Specifications of Alienware x17 R1.....	9
Dimensions and weight.....	9
Processor.....	9
Chipset.....	9
Operating system.....	10
Memory.....	10
External ports.....	10
Internal slots.....	11
Ethernet.....	11
Wireless module.....	11
Audio.....	12
Storage.....	12
Media-card reader.....	13
Keyboard.....	13
Camera.....	14
Touchpad.....	14
Power adapter.....	15
Battery.....	15
Display.....	16
GPU—Integrated.....	17
GPU—Discrete.....	17
Operating and storage environment.....	17
Chapter 4: Keyboard shortcuts of Alienware x17 R1.....	19
Chapter 5: Low blue light.....	21
Chapter 6: Alienware Command Center.....	22
Chapter 7: Getting help and contacting Alienware.....	23

Set up your Alienware x17 R1

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 x17 R1

Front



1. Left microphone

Provides digital sound input for audio recording and voice calls.

2. Infrared emitter

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

3. Camera

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

4. Infrared camera

Enhances security when paired with Windows Hello face authentication.

5. Infrared emitter

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.

7. Left tweeter speaker

Provides higher frequency audio output.

8. Right tweeter speaker

Provides higher frequency audio output.

Right



1. Headset port

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

Left



1. Power-adaptor port

Connect a power adaptor 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.

NOTE: Your computer may be shipped with an optional AlienFX lighting feature on the touchpad depending on the configuration you have ordered.

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.

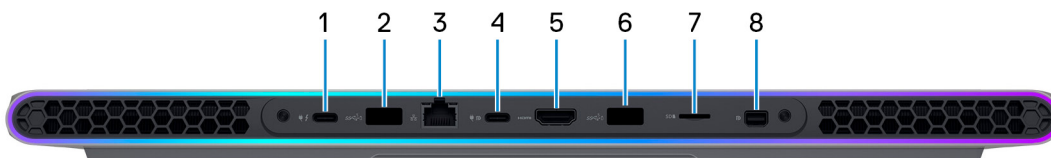
Press to put the computer in sleep state if it is turned on.

When the computer is turned on, press the power button to put the computer into sleep state; press and hold the power button for 4 seconds to force shut-down the computer.

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

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](#).

Back



1. 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: You can connect a Dell Docking Station to the Thunderbolt 4 ports. For more information, see the knowledge base article [000124295](#) at www.dell.com/support.

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.

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 connected USB devices.

NOTE: Connected USB devices will not charge when the computer is turned off or in sleep state. To start charging connected devices, turn on the computer.

3. Network port

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

4. USB 3.2 Gen 2 (Type C port) with DisplayPort and Power Delivery

Connect devices such as external storage devices, printers, and external displays. Provides data transfer rate of 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.

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

5. HDMI port

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

6. 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 connected USB devices.

NOTE: Connected USB devices will not charge when the computer is turned off or in sleep state. To start charging connected devices, turn on the computer.

7. microSD-card slot

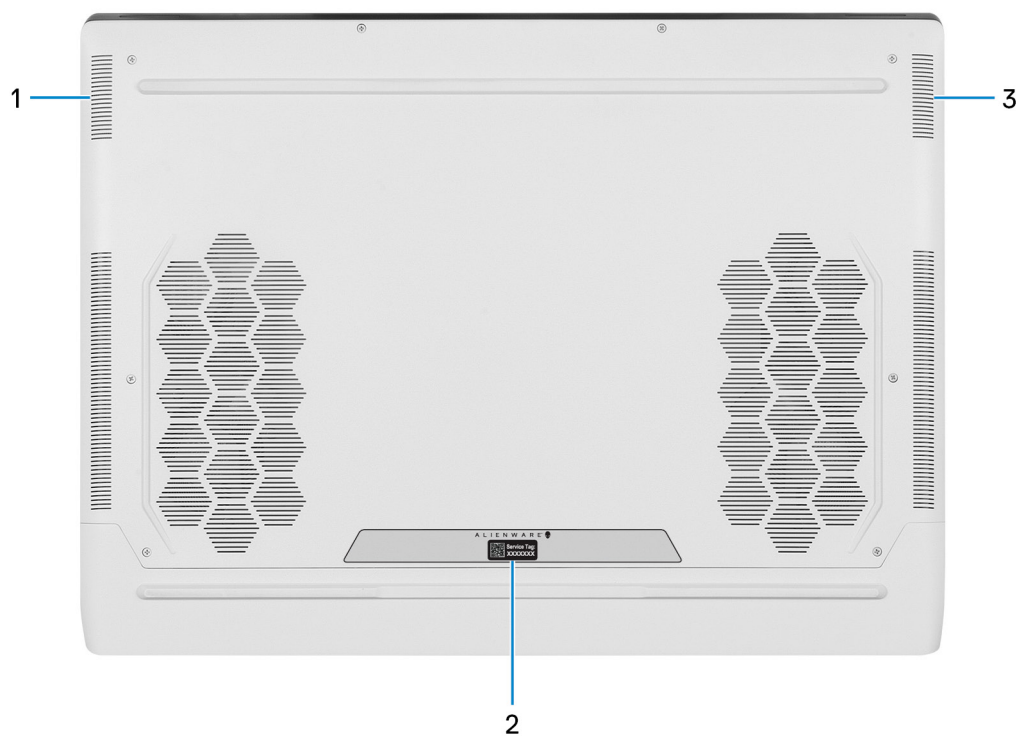
Reads from and writes to the microSD card. The computer supports the following card types:

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

8. Mini DisplayPort

Connect to a TV or another DisplayPort-in enabled device. Mini DisplayPort provides video and audio output.

Bottom



1. Left woofer speaker

Provides lower frequency 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 woofer speaker

Provides lower frequency audio output.

Specifications of Alienware x17 R1

Dimensions and weight

The following table lists the height, width, depth, and weight of your Alienware x17 R1.

Table 1. Dimensions and weight

Description	Values
Height (maximum)	20.90 mm (0.82 in.) for computers shipped with 360 Hz displays 21.41 mm (0.84 in.) for computers shipped with 120 Hz and 165 Hz displays
Width	399.23 mm (15.72 in.)
Depth	299.49 mm (11.79 in.)
Weight (maximum)	3.20 kg (7.05 lb)  NOTE: The weight of your computer depends on the configuration ordered and manufacturing variability.

Processor

The following table lists the details of the processors supported by your Alienware x17 R1.

Table 2. Processor

Description	Option one	Option two
Processor type	11 th Generation Intel Core i7-11800H	11 th Generation Intel Core i9-11980HK
Processor wattage	45 W	65 W
Processor core count	8	8
Processor thread count	16	16
Processor speed	Up to 4.6 GHz	Up to 5 GHz
Processor cache	24 MB	24 MB
Integrated graphics	Intel UHD Graphics	Intel UHD Graphics

Chipset

The following table lists the details of the chipset supported by your Alienware x17 R1.

Table 3. Chipset

Description	Values
Chipset	HM570
Processor	11 th Generation Intel Core i7/i9K

Table 3. Chipset (continued)

Description	Values
DRAM bus width	64-bit
Flash EPROM	32 MB
PCIe bus	Up to Gen4

Operating system

Your Alienware x17 R1 supports the following operating systems:

- Windows 11 Home, 64-bit
- Windows 11 Pro, 64-bit
- Windows 10 Home, 64-bit
- Windows 10 Pro, 64-bit

Memory

The following table lists the memory specifications of your Alienware x17 R1.

Table 4. Memory specifications

Description	Values
Memory slots	Two SO-DIMM slots
Memory type	DDR4
Memory speed	• 3200 MHz • 3466 MHz, XMP
Maximum memory configuration	64 GB
Minimum memory configuration	16 GB
Memory size per slot	8 GB, 16 GB, 32 GB
Memory configurations supported	• 16 GB, 2 x 8 GB, 3200 MHz, dual-channel DDR4 • 32 GB, 2 x 16 GB, 3200 MHz, dual-channel DDR4 • 32 GB, 2 x 16 GB, 3466 MHz, dual-channel DDR4, XMP • 64 GB, 2 x 32 GB, 3466 MHz, dual-channel DDR4, XMP

External ports

The following table lists the external ports of your Alienware x17 R1.

Table 5. External ports

Description	Values
Network port	One RJ-45 port
USB ports	• Two USB 3.2 Gen 1 ports with PowerShare

Table 5. External ports (continued)

Description	Values
	- One USB 3.2 Gen 2 (Type-C) port with DisplayPort and Power Delivery - One Thunderbolt 4 port with Power Delivery
Audio port	One universal audio jack
Video port	- One HDMI 2.1 port - One Mini DisplayPort 1.4 - One Thunderbolt 4 port with Power Delivery NOTE: A USB Type-C to DisplayPort adapter (sold separately) is required to connect to a DisplayPort device.
Media-card reader	One microSD-card slot
Power-adaptor port	One 7.4 mm x 5.1 mm DC-in
Security-cable slot	None

Internal slots

The following table lists the internal slots of your Alienware x17 R1.

Table 6. Internal slots

Description	Values
M.2	Two M.2 2230/2280 slots for solid-state drives 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.

Ethernet

The following table lists the wired Ethernet Local Area Network (LAN) specifications of your Alienware x17 R1.

Table 7. Ethernet specifications

Description	Values
Model number	Killer E3100G PCI-e Gigabit ethernet controller
Transfer rate	10/100/1000/2500 Mbps

Wireless module

The following table lists the Wireless Local Area Network (WLAN) module supported on your Alienware x17 R1.

Table 8. Wireless module specifications

Description	Values
Model number	Intel Killer 1675w

Table 8. Wireless module specifications (continued)

Description	Values
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 x17 R1.

Table 9. Audio specifications

Description	Values
Audio controller	Realtek ALC3281
Stereo conversion	Not supported
Internal audio interface	High definition audio interface
External audio interface	One universal audio jack
Number of speakers	• Two tweeter speakers • Two woofer speakers
Internal-speaker amplifier	• Realtek ALC 3281 built-in amplifier for tweeter speakers • Realtek ALC1309 built-in amplifier for woofer speakers
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 x17 R1.

Your Alienware x17 R1 supports:

- One M.2 2230/2280 solid-state drive on M.2 card slot one

- One M.2 2230/2280 solid-state drive on M.2 card slot two

The primary drive of your Alienware x17 R1 varies with the storage configuration. The primary drive of your computer is the drive where your operating system is installed.

Table 10. 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 2280 solid-state drive	PCIe Gen3 x4 NVMe, up to 32 Gbps	Up to 1 TB
M.2 2280 solid-state drive	PCIe Gen4 x4 NVMe, up to 64 Gbps	Up to 2 TB

Media-card reader

The following table lists the media cards supported by your Alienware x17 R1.

Table 11. Media-card reader specifications

Description	Values
Media-card type	One microSD-card slot
Media-cards supported	• Micro Secure Digital (mSD) • Micro Secure Digital High Capacity (mSDHC) • Micro Secure Digital Extended Capacity (mSDXC)
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 x17 R1.

Table 12. Keyboard specifications

Description	Values
Keyboard type	• RGB per-key backlit keyboard • RGB per key backlit Mechanical 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.

Table 12. Keyboard specifications (continued)

Description	Values
	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 x17 R1.

Table 13. Camera specifications

Description	Values
Number of cameras	One
Camera type	One 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:	
Still image	0.23 megapixel
Video	640 x 360 at 30 fps
Diagonal viewing angle:	
Camera	75.8 degrees
Infrared camera	75.8 degrees

Touchpad

The following table lists the touchpad specifications of your Alienware x17 R1.

Table 14. Touchpad specifications

Description	Values
Touchpad resolution:	
Horizontal	1229
Vertical	929
Touchpad dimensions:	
Horizontal	105 mm (4.13 in.)

Table 14. Touchpad specifications (continued)

Description		Values
	Vertical	80 mm (3.15 in.)
Touchpad gestures		For more information about touchpad gestures available on Windows, see the Microsoft knowledge base article 4027871 at support.microsoft.com .

Power adapter

The following table lists the power adapter specifications of your Alienware x17 R1.

Table 15. Power adapter specifications

Description		Option one	Option two
Type		240 W AC adapter	330 W AC adapter
Connector dimensions:			
	External diameter	7.40 mm	7.40 mm
	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)		3.50 A	4.40 A
Output current (continuous)		12.31 A	16.92 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 x17 R1.

Table 16. 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:		

Table 16. Battery specifications (continued)

Description		Values
	Height	309.80 mm (12.20 in.)
	Width	82 mm (3.23 in.)
	Depth	6.35 mm (0.25 in.)
Temperature range:		
	Operating	0°C to 60°C (32°F to 140°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) i 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 .		3 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 x17 R1.

Table 17. Display specifications

Description		Option one	Option two	Option three
Display type		Ultra High Definition (UHD)	Full High Definition (FHD)	Full High Definition (FHD)
Display-panel technology		Wide-Viewing Angle (WVA)	Wide-Viewing Angle (WVA)	Wide-Viewing Angle (WVA)
Display-panel dimensions (active area):				
	Height	214.81 mm (8.46 in.)	214.81 mm (8.46 in.)	214.81 mm (8.46 in.)
	Width	381.89 mm (15.04 in.)	381.89 mm (15.04 in.)	381.89 mm (15.04 in.)
	Diagonal	438.16 mm (17.25 in.)	438.16 mm (17.25 in.)	438.16 mm (17.25 in.)
Display-panel native resolution		3840 x 2160	1920 x 1080	1920 x 1080
Luminance (typical)		500 nits	300 nits	300 nits
Megapixels		8.29	2.07	2.07
Color gamut		100% Adobe RGB	100% sRGB	100% sRGB

Table 17. Display specifications (continued)

Description	Option one	Option two	Option three
Pixels Per Inch (PPI)	255	127	127
Contrast ratio (typ)	1200:1	1000:1	800:1
Response time (max)	4 ms	1 ms	3 ms
Refresh rate	120 Hz	165 Hz	360 Hz
Horizontal view angle	85 +/- degrees	85 +/- degrees	85 +/- degrees
Vertical view angle	85 +/- degrees	85 +/- degrees	85 +/- degrees
Pixel pitch	0.10 mm	0.20 mm	0.20 mm
Power consumption (maximum)	12.20 W	7.20 W	8.40 W
Anti-glare vs glossy finish	Anti-glare	Anti-glare	Anti-glare
Touch options	No	No	No
Adaptive sync support	None	None	G-SYNC, Advanced Optimus

GPU—Integrated

The following table lists the specifications of the integrated Graphics Processing Unit (GPU) supported by your Alienware x17 R1.

Table 18. GPU—Integrated

Controller	Memory size	Processor
Intel UHD Graphics	Shared system memory	11 th Generation Intel Core i7/i9k

GPU—Discrete

The following table lists the specifications of the discrete Graphics Processing Unit (GPU) supported by your Alienware x17 R1.

Table 19. GPU—Discrete

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

Operating and storage environment

This table lists the operating and storage specifications of your Alienware x17 R1.

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

Table 20. 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)	110 G†	160 G†
Altitude range	-15.2 m to 3048 m (-49.87 ft to 10000 ft)	-15.2 m to 10668 m (-49.87 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.

Keyboard shortcuts of Alienware x17 R1

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 **2**, 2 is typed out; 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 21. List of keyboard shortcuts

Keys	Description
	Disable/enable Full Speed Mode
	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 22. 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 23. 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.

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 [000179513](#) 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 24. Alienware products and online self-help resources

Self-help resources	Resource location
Information about Alienware products and services	www.alienware.com
Dell Help & Support app	
Tips	
Contact Support	In Windows search, type Help and Support , and press Enter .
Online help for operating system	www.dell.com/support/windows
Troubleshooting information, user manuals, setup instructions, product specifications, technical help blogs, drivers, software updates, and so on	www.alienware.com/gamingservices
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.