Inspiron 16 7610

Setup and Specifications

Notes, cautions, and warnings

(i) | 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

Set up your Inspiron 16 7610

(i) **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.

(i) **NOTE:** The battery may go into power-saving mode during shipment to conserve charge on the battery. Ensure that the power adapter is connected to your computer when it is turned on for the first time.

2. Finish Windows setup.

   Follow the on-screen instructions to complete the setup. When setting up, Dell recommends that you:
   - Connect to a network for Windows updates.
     (i) **NOTE:** If connecting to a secured wireless network, enter the password for the wireless network access when prompted.
   - If connected to the Internet, sign in with or create a Microsoft account. If not connected to the Internet, create an offline account.
   - On the **Support and Protection** screen, enter your contact details.

3. Locate and use Dell apps from the Windows Start menu—Recommended.

Table 1. Locate Dell apps

| Resources	Description
DELL	**My Dell** Centralized location for key Dell applications, help articles, and other important information about your computer. It also notifies you about the warranty status, recommended accessories, and software updates if available.

Table 1. Locate Dell apps (continued)

Resources	Description
	SupportAssist SupportAssist proactively and predictively identifies hardware and software issues on your computer and automates the engagement process with Dell Technical support. It addresses performance and stabilization issues, prevents security threats, monitors, and detects hardware failures. For more information, see *SupportAssist for Home PCs User's Guide* at www.dell.com/serviceabilitytools. Click **SupportAssist** and then, click **SupportAssist for Home PCs**. ⓘ **NOTE:** In SupportAssist, click the warranty expiry date to renew or upgrade your warranty.
	Dell Update Updates your computer with critical fixes and latest device drivers as they become available. For more information about using Dell Update, see the knowledge base article 000149088 at www.dell.com/support.
	Dell Digital Delivery Download software applications, which are purchased but not preinstalled on your computer. For more information about using Dell Digital Delivery, see the knowledge base article 000129837 at www.dell.com/support.

Views of Inspiron 16 7610

Right
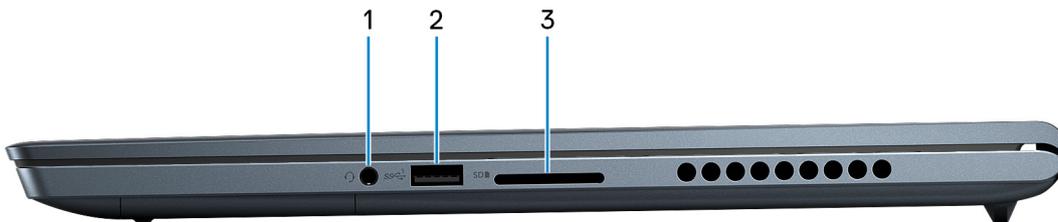
1. **Universal audio jack**

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

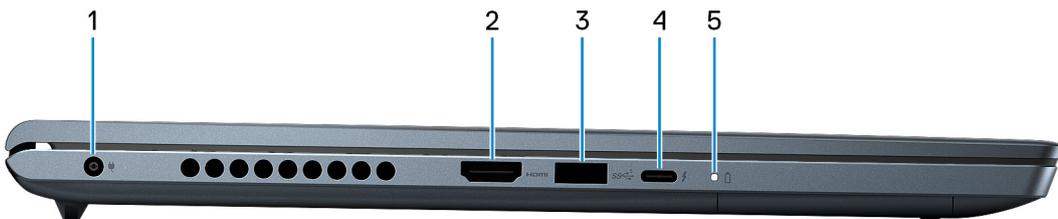2. **USB 3.2 Gen 1 port**

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

3. **SD-card slot**

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

   ● Secure Digital (SD)
   ● Secure Digital High Capacity (SDHC)
   ● Secure Digital Extended Capacity (SDXC)

Left

1. **Power-adapter port**

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

2. **HDMI 2.0 port**

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

3. **USB 3.2 Gen 1 port**

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

4. **Thunderbolt 4 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.

> (i) **NOTE:** You can connect a Dell Docking Station to the Thunderbolt 4 ports. For more information, see the knowledge base article SLN286158 at www.dell.com/support.

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

> (i) **NOTE:** USB4 is backward compatible with USB 3.2, USB 2.0, and Thunderbolt 3.

> (i) **NOTE:** Thunderbolt 4 supports two 4K displays.

5. **Power and battery-status light**

   Indicates the power state and battery state of the computer.

   Solid white—Power adapter is connected and the battery is charging.

   Solid amber—Battery charge is low or critical.

   Off—Battery is fully charged.

   > (i) **NOTE:** On certain computer models, the power and battery-status light are also used for diagnostics. For more information, see the *Troubleshooting* section in your computer's *Service Manual*.

Top

1. **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 with optional fingerprint reader**

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

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.

If the power button has a fingerprint reader, place your finger on the power button to log in.

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

Front

1. **Left microphone**

   Provides digital sound input for audio recording and voice calls.

2. **Privacy shutter**

   Slide the privacy shutter to cover the camera lens and protect your privacy when the camera is not in use.

3. **Camera**

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

4. **Camera-status light**

   Turns on when the camera is in use.

5. **Right microphone**

   Provides digital sound input for audio recording and voice calls.

Bottom
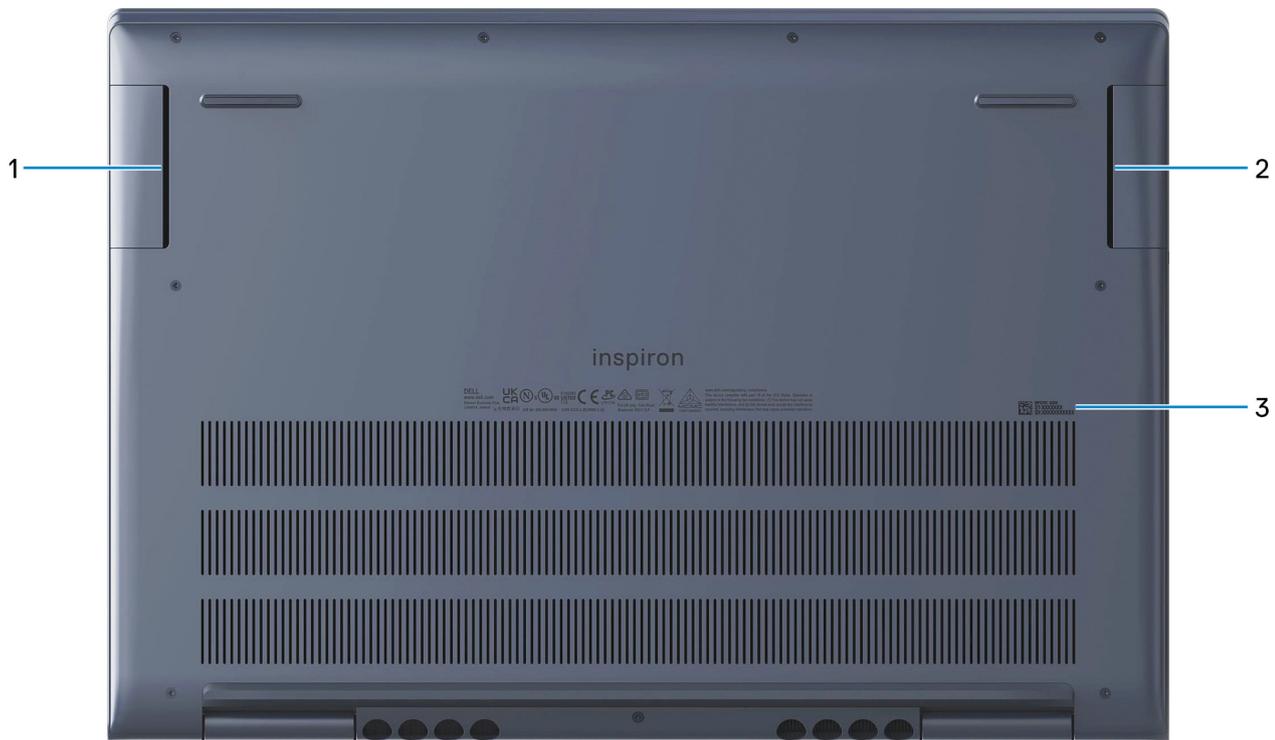
1. **Left speaker**

   Provides audio output.

2. **Right speaker**

   Provides audio output.

3. **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.

Specifications of Inspiron 16 7610

Dimensions and weight

The following table lists the height, width, depth, and weight of your Inspiron 16 7610.

Table 2. Dimensions and weight

Description	Values
Height:	
Front height	16.80 mm (0.66 in.)
Rear height	18.99 mm (0.75 in.)
Width	355.28 mm (13.99 in.)
Depth	247.50 mm (9.74 in.)
Weight (maximum)	2.15 kg (4.74 lb)
	(i) **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 Inspiron 16 7610.

Table 3. Processor

Description	Option one	Option two
Processor type	11th Generation Intel Core i5-11400H	11th Generation Intel Core i7-11800H
Processor wattage	45 W	45 W
Processor core count	6	8
Processor thread count	12	16
Processor speed	Up to 4.5 GHz	Up to 4.6 GHz
Processor cache	12 MB	24 MB
Integrated graphics	Intel UHD Graphics	Intel UHD Graphics

Chipset

The following table lists the details of the chipset supported by your Inspiron 16 7610.

Table 4. Chipset

Description	Values
Chipset	Integrated in the processor
Processor	11th Generation Intel Core i5/i7
DRAM bus width	64-bit
Flash EPROM	32 MB
PCIe bus	Up to Gen4

Operating system

Your Inspiron 16 7610 supports the following operating systems:

- Windows 11 Pro, 64-bit
- Windows 11 Home, 64-bit
- Windows 11 Home in S-Mode, 64-bit
- Windows 11 Pro National Academic, 64-bit
- Windows 10 Pro, 64-bit
- Windows 10 Home, 64-bit

Memory

The following table lists the memory specifications of your Inspiron 16 7610.

Table 5. 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, 16 GB
Memory configurations supported	8 GB, 2 x 4 GB, DDR4, 3200 MHz, dual-channel 12 GB, 1 x 4 GB + 1 x 8 GB, DDR4, 3200 MHz 16 GB, 2 x 8 GB, DDR4, 3200 MHz, dual-channel 24 GB, 1 x 16 GB + 1 x 8 GB, DDR 3200 MHz 32 GB, 2 x 16 GB, DDR4, 3200 MHz, dual-channel

External ports

The following table lists the external ports on your Inspiron 16 7610.

Table 6. External ports

Description	Values
USB ports	- Two USB 3.2 Gen 1 ports - One Thunderbolt 4 port with DisplayPort and Power Delivery ⓘ **NOTE:** You can connect a Dell Docking Station to this port. For more information, see the knowledge base article 000124295 at www.dell.com/support.
Audio port	One universal audio jack
Video port/ports	- One HDMI 2.0 port - One Thunderbolt 4 port with DisplayPort and Power Delivery ⓘ **NOTE:** A USB Type-C to DisplayPort adapter (sold separately) is required to connect to a DisplayPort device.
Media-card reader	One SD-card slot
Power-adapter port	One 4.50 mm x 2.90 mm DC-in
Security-cable slot	Not supported

Internal slots

The following table lists the internal slots of your Inspiron 16 7610.

Table 7. Internal slots

Description	Values
M.2	- One M.2 2230 slot for WiFi and Bluetooth combo card - One M.2 2230/2280 slot for solid-state drive - One M.2 2230 slot for solid-state drive ⓘ **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.

Wireless module

The following table lists the Wireless Local Area Network (WLAN) module supported on your Inspiron 16 7610.

Table 8. Wireless module specifications

Description	Values
Model number	Intel AX201
Transfer rate	Up to 2400 Mbps

Table 8. Wireless module specifications (continued)

Description	Values
Frequency bands supported	2.4 GHz/5 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 Inspiron 16 7610.

Table 9. Audio specifications

Description		Values
Audio controller		Realtek ALC3204
Stereo conversion		Supported
Internal audio interface		High-definition audio
External audio interface		One universal audio jack
Number of speakers		Two
Internal-speaker amplifier		Supported (audio codec integrated)
External volume controls		Keyboard shortcut controls
Speaker output:		
	Average speaker output	2 W
	Peak speaker output	2.5 W
Subwoofer output		Not supported
Microphone		Dual-array microphones

Storage

This section lists the storage options on your Inspiron 16 7610.

Your Inspiron 16 7610 supports one of the following storage configurations:
- One M.2 2230/2280 solid-state drive
- One M.2 2230 solid-state drive + one M.2 2230/2280 solid-state drive
- (i) **NOTE:** When upgrading to a M.2 2280 NVMe Gen4.0 x4 solid-state drive, you may order a copper thermal shield from Dell support for better thermal performance.

The primary drive of your Inspiron 16 7610 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 Gen3.0x4 NVMe, up to 32 Gbps	Up to 1 TB
M.2 2280 solid-state drive	PCIe Gen4.0x4 NVMe, up to 32 Gbps	Up to 2 TB

Media-card reader

The following table lists the media cards supported by your Inspiron 16 7610.

Table 11. Media-card reader specifications

Description	Values
Media-card type	One SD card slot
Media-cards supported	- Secure Digital (SD) - Secure Digital High Capacity (SDHC) - Secure Digital Extended Capacity (SDXC)
ⓘ **NOTE:** The maximum capacity supported by the media-card reader varies depending on the standard of the media card installed in your computer.	

Identifying the media-card reader

1. On the taskbar, click the search box, and then type `Device Manager`.
2. Click **Device Manager**.
   The **Device Manager** window is displayed.
3. Expand **Universal Serial Bus controllers**.

Browsing a media card

1. Insert the media card with the metal contacts facing down.
   The card will auto-play and a notification is displayed on the screen.
2. Follow the onscreen instructions.

Keyboard

The following table lists the keyboard specifications of your Inspiron 16 7610.

Table 12. Keyboard specifications

Description	Values
Keyboard type	Backlit keyboard
Keyboard layout	QWERTY
Number of keys	- United States and Canada: 99 keys - United Kingdom: 100 keys - Japan: 103 keys

Table 12. Keyboard specifications (continued)

Description	Values
Keyboard size	X=18.7 mm key pitch Y=18.05 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 Inspiron 16 7610.

Table 13. Camera specifications

Description	Values
Number of cameras	One
Camera type	HD RGB camera
Camera location	Front camera
Camera sensor type	CMOS sensor technology
Camera resolution:	
Still image	0.92 megapixel
Video	1280 x 720 (HD) at 30 fps
Diagonal viewing angle:	74.9 degrees

Touchpad

The following table lists the touchpad specifications of your Inspiron 16 7610.

Table 14. Touchpad specifications

Description	Values
Touchpad resolution:	
Horizontal	4085
Vertical	2742
Touchpad dimensions:	
Horizontal	133 mm (5.24 in.)
Vertical	90 mm (3.54 in.)

Table 14. Touchpad specifications (continued)

Description	Values
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 Inspiron 16 7610.

Table 15. Power adapter specifications

Description		Option one	Option two
Type		90 W AC-adapter	130 W AC-adapter
Connector dimensions:			
	External diameter	4.50 mm	4.50 mm
	Internal diameter	2.90 mm	2.90 mm
Input voltage		100 VAC–240 VAC	100 VAC–240 VAC
Input frequency		50 Hz–60 Hz	50 Hz–60 Hz
Input current (maximum)		1.50 A	2.50 A
Output current (continuous)		4.62 A	6.70 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	32°C to 104°C (89.6°F to 219.2°F)	32°C to 104°C (89.6°F to 219.2°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 Inspiron 16 7610.

Table 16. Battery specifications

Description		Option one	Option two
Battery type		3-cell polymer, 56 Wh	6-cell polymer, 86 Wh
Battery voltage		13.20 VDC	● 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.)

Table 16. Battery specifications (continued)

Description		Option one	Option two
	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 45°C (32°F to 113°F)	0°C to 45°C (32°F to 113°F)
	Storage	0°C to 70°C (32°F to 158°F)	0°C to 70°C (32°F to 158°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) (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, *Me and My Dell* on www.dell.com.		3 hours (when the computer is off)	3 hours (when the computer is off)
Coin-cell battery		Not supported	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.**			

Display

The following table lists the display specifications of your Inspiron 16 7610.

Table 17. Display specifications

Description		Values
Display type		3K
Display-panel technology		Wide-Viewing Angle (WVA), ComfortView Plus
Display-panel dimensions (active area):		
	Height	344.68 mm (13.57 in.)
	Width	215.42 mm (8.48 in.)
	Diagonal	406.46 mm (16.00 in.)
Display-panel native resolution		3072 x 1920
Luminance (typical)		300 nits
Megapixels		5.89
Color gamut		100% sRGB
Pixels Per Inch (PPI)		226

Table 17. Display specifications (continued)

Description	Values
Contrast ratio (min)	1000:1
Response time (max)	35 ms
Refresh rate	60 Hz
Horizontal view angle	85 +/- degrees
Vertical view angle	85 +/- degrees
Pixel pitch	0.11 mm
Power consumption (maximum)	3.80 W
Anti-glare vs glossy finish	Anti-glare
Touch options	No

Fingerprint reader (optional)

The following table lists the specifications of the optional fingerprint-reader of your Inspiron 16 7610.

Table 18. Fingerprint reader specifications

Description	Values
Fingerprint-reader sensor technology	Capacitive
Fingerprint-reader sensor resolution	500 dpi
Fingerprint-reader sensor pixel size	108 x 88

GPU—Integrated

The following table lists the specifications of the integrated Graphics Processing Unit (GPU) supported by your Inspiron 16 7610.

Table 19. GPU—Integrated

Controller	Memory size	Processor
Intel UHD Graphics	Shared system memory	11th Generation Intel Core i5/i7

GPU—Discrete

The following table lists the specifications of the discrete Graphics Processing Unit (GPU) supported by your Inspiron 16 7610.

Table 20. GPU—Discrete

Controller	Memory size	Memory type
NVIDIA GeForce GTX 1650	4 GB	GDDR6
NVIDIA GeForce RTX 3050	4 GB	GDDR6

Table 20. GPU—Discrete (continued)

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

Operating and storage environment

This table lists the operating and storage specifications of your Inspiron 16 7610.

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

Table 21. 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.

ComfortView Plus

⚠️ | **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 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 22. List of keyboard shortcuts

Function key	Re-defined key (for multi-media control)	Behavior
F1	fn + F1	Mute audio
F2	fn + F2	Decrease volume
F3	fn + F3	Increase volume
F4	fn + F4	Play/Pause
F5	fn + F5	Toggle keyboard backlight (optional)
F6	fn + F6	Decrease brightness
F7	fn + F7	Increase brightness
F8	fn + F8	Switch to external display
F10	fn + F10	Print screen
F11	fn + F11	Home
F12	fn + F12	End

The **fn** key is also used with selected keys on the keyboard to invoke other secondary functions.

Table 23. List of keyboard shortcuts

Function key	Behavior
fn + B	Pause/Break
fn + H	Toggle between power light and battery-status light
fn + S	Toggle scroll lock
fn + R	System request
fn + ctrl	Open application menu
fn + esc	Toggle fn-key lock
fn + page up	Page up

Table 23. List of keyboard shortcuts (continued)

Function key	Behavior
fn + page down	Page down

Getting help and contacting Dell

Self-help resources

You can get information and help on Dell products and services using these self-help resources:

Table 24. Self-help resources

Self-help resources	Resource location
Information about Dell products and services	www.dell.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 www.dell.com/support/linux
Access top solutions, diagnostics, drivers and downloads, and learn more about your computer through videos, manuals and documents.	Your Dell 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.
Dell knowledge base articles for a variety of computer concerns	1. Go to www.dell.com/support. 2. On the menu bar at the top of the Support page, select **Support** > **Knowledge Base**. 3. In the Search field on the Knowledge Base page, type the keyword, topic, or model number, and then click or tap the search icon to view the related articles.

Contacting Dell

To contact Dell for sales, technical support, or customer service issues, see www.dell.com/contactdell.

ⓘ **NOTE:** Availability varies by country/region and product, and some services may not be available in your country/region.

ⓘ **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.