Inspiron 3790

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 Inspiron 3790

- 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.



- NOTE: To conserve battery power, the battery might enter power saving mode. Connect the power adapter and press the power button to turn on the computer.
- 2. Finish operating system setup.

For Ubuntu:

Follow the on-screen instructions to complete the setup. For more information about installing and configuring Ubuntu, see the knowledge base articles SLN151664 and SLN151748 at www.dell.com/support.

For Windows:

Follow the on-screen instructions to complete the setup. When setting up, Dell recommends that you:

- · Connect to a network for Windows updates.
 - 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	٤
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Description 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.

SupportAssist



Pro-actively checks the health of your computer's hardware and software. The SupportAssist OS Recovery tool troubleshoots issues with the operating system. For more information, see the SupportAssist documentation at www.dell.com/support.

NOTE: In SupportAssist, click the warranty expiry date to renew or upgrade your warranty.

Resources

Description



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 SLN305843 at www.dell.com/support.



Dell Digital Delivery

Download software applications, which are purchased but not pre-installed on your computer. For more information about using Dell Digital Delivery, see the knowledge base article 153764 at www.dell.com/support.

Views of Inspiron 3790

Right



1. SD-card slot

Reads from and writes to the SD card.

2. USB 2.0 port

Connect peripherals such as external storage devices and printers. Provides data transfer speeds up to 480 Mbps.

3. Optical drive

Reads from and writes to CDs, DVDs, and Blu-ray discs.

NOTE: Blu-ray support is only available in certain regions.

4. Security-cable slot (wedge-shaped)

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

Left



1. Power-adapter port

Connect a power adapter to provide power to your computer.

2. HDMI port

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

3. Network port

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

4. USB 3.1 Gen 1 ports (2)

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

5. Headset port

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

Base



1. Left-click area

Press to left-click.

2. Touchpad

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

Display



1. Camera

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

2. Camera-status light

Turns on when the camera is in use.

3. Microphone

Provides digital sound input for audio recording, voice calls, and so on.

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 Inspiron 3790

Dimensions and weight

Table 2. Dimensions and weight

Description	Values
Height:	
Front	21.86 mm (0.86 in.)
Rear	25 mm (0.98 in.)
Width	415.40 mm (16.35 in.)
Depth	279.20 mm (10.99 in.)
Weight	3.03 kg (6.68 lb)
	NOTE: The weight of your computer depends on the configuration ordered and the manufacturing variability.

Processors

Table 3. Processors

Description	Values		
Processors	10 th Generation Intel Core i3-10110U	10 th Generation Intel Core i5-10210U	10 th Generation Intel Core i7-10510U
Wattage	15 W	15 W	15 W
Core count	2	4	4
Thread count	4	8	8
Speed	Up to 4.1 GHz	Up to 4.2 GHz	Up to 4.9 GHz
Cache	4 MB	6 MB	8 MB
Integrated graphics	Intel UHD graphics 620	Intel UHD graphics 620	Intel UHD graphics 620

Chipset

Table 4. Chipset

Description	Values	
Chipset	HM470	
Processor	10 th Generation Intel Core i3/i5/i7	

Description	Values
DRAM bus width	128-bit
Flash EPROM	24 MB
PCle bus	Up to Gen3.0

Operating system

- · Windows 10 Home (64-bit)
- · Windows 10 Professional (64-bit)
- · Windows 10 Home in S mode (64bit)
- · Ubuntu

Memory

Table 5. Memory specifications

Description	Values	
Slots	Two SODIMM slots	
Туре	Dual-channel DDR4	
Speed	2666 MHz	
Maximum memory	16 GB	
Minimum memory	4 GB	
Memory size per slot	4 GB, 8 GB, 16 GB	
Configurations supported	 4 GB DDR4 at 2666 MHz (1 x 4 GB) 8 GB DDR4 at 2666 MHz (2 x 4 GB) 8 GB DDR4 at 2666 MHz (1 x 8 GB) 12 GB DDR4 at 2666 MHz (1 x 4 GB + 1 x 8 GB) 16 GB DDR4 at 2666 MHz (2 x 8 GB) 16 GB DDR4 at 2666 MHz (1 x 16 GB) 	

Ports and connectors

Table 6. External ports and connectors

Description	Values	
External:		
Network	On RJ-45 port	
USB	Two USB 3.1 Gen 1 portsOne USB 2.0 port	
Audio	One headset (headphone and microphone combo) port	
Video	One HDMI 1.4b port	
Media card reader	One SD-card slot	

Description	Values
Docking port	Not supported
Power adapter port	One 4.5 mm x 2.9 mm DC-in
Security	One security-cable slot (wedge-shaped)
Table 7. Internal ports and connectors	
Description	Values
Internal:	
M.2	 One M.2 2230 slot for WiFi and Bluetooth combo card One M.2 2230/2280 slot for solid-state drive/Intel Optane
	NOTE: To learn more about the features of different types of M.2 cards, see the knowledge base article SLN301626.

Communications

Ethernet

Table 8. Ethernet specifications

Description	Values
Model number	RTL8106E ethernet controller
Transfer rate	10/100 Mbps

Wireless module

Table 9. Wireless module specifications

Description	Values	
Model number	Intel 9462NGW	Intel 9560NGW
Transfer rate	Up to 433 Mbps	Up to 867 Mbps
Frequency bands supported	2.4 GHz/5 GHz	2.4 GHz/5 GHz
Wireless standards	Wi-Fi 802.11b/g/aWi-Fi 4 (WiFi 802.11n)Wi-Fi 5 (WiFi 802.11ac)	Wi-Fi 802.11b/g/aWi-Fi 4 (WiFi 802.11n)Wi-Fi 5 (WiFi 802.11ac)
Encryption	64-bit/128-bit WEPAES-CCMPTKIP	64-bit/128-bit WEPAES-CCMPTKIP
Bluetooth	Bluetooth 5.0	Bluetooth 5.0

Audio

Table 10. Audio specifications

Description	Values
Controller	Realtek ALC3204
Stereo conversion	Supported
Internal interface	High-definition audio
External interface	Universal Audio Jack
Speakers	2
Internal speaker amplifier	Supported
External volume controls	Keyboard shortcut controls
Speaker output:	
Average	2 W
Peak	2.5 W
Subwoofer output	Not supported
Microphone	Digital microphone in camera assembly

Storage

Your computer supports one of the following configurations:

- · One 2.5-inch hard-drive
- · One M.2 2230/2280 solid-state drive or M.2 2280 Intel Optane Memory H10 with solid-state storage
- One 2.5-inch hard-drive and one M.2 2230/2280 solid-state drive
- · One 2.5-inch hard-drive and one M.2 2280 Intel Optane memory or Intel Optane Memory H10 with solid-state storage

The primary drive of your computer varies with the storage configuration. For computers:

- with a M.2 card (either a solid-state drive or a M.2 Intel Optane Memory H10 with solid-state storage), the M.2 drive is the primary drive
- with a M.2 2280 Intel Optane Memory M10 or M15, the 2.5-inch hard drive is the primary drive
- without a M.2 card, the 2.5-inch hard drive is the primary drive

Table 11. Storage specifications

Storage type	Interface type	Capacity
2.5-inch hard-disk drive	SATA AHCI, up to 6 Gbps	Up to 2 TB
M.2 2230/2280 solid-state drive	PCle Gen3.0x4 NVMe, up to 32 Gbps	Up to 512 GB
M.2 2280 Intel Optane Memory H10 with solid-state storage	PCle Gen3.0x2 NVMe, up to 16 Gbps	Up to 256 GB
9.5 mm slimline DVD-RW drive	SATA AHCI, up to 1.5 Gbps	One slimline DVD

Intel Optane memory (optional)

Intel Optane technology utilizes 3D XPoint memory technology and functions as a non-volatile storage cache/accelerator and/or storage device depending on the Intel Optane memory installed in your computer.

Your computer supports the following Intel Optane Memory devices:

- Intel Optane Memory M10
- · Intel Optane Memory M15
- · Intel Optane Memory H10 with solid-state storage

Intel Optane Memory M10

Intel Optane Memory M10 functions only as a non-volatile storage cache/accelerator, enabling enhanced read/write speeds for hard-drive storage. It neither replaces nor adds to the memory (RAM) installed on your computer.

Table 12. Intel Optane Memory M10 specifications

Description	Values
Interface	PCIe Gen3.0x2 NVMe
Connector	M.2
Form factor	2280
Capacity	16 GB or 32 GB

NOTE: Intel Optane Memory M10 is supported on computers that meet the following requirements:

- 7th Generation or higher Intel Core i3/i5/i7 processors
- Windows 10 64-bit version or higher (Anniversary Update)
- · Intel Rapid Storage Technology driver version 15.7 or higher

Intel Optane Memory M15

Intel Optane Memory M15 functions only as a non-volatile storage cache/accelerator, enabling enhanced read/write speeds for hard-drive storage. It neither replaces nor adds to the memory (RAM) installed on your computer.

Table 13. Intel Optane Memory M15 specifications

Description	Values
Interface	PCle Gen3.0x4 NVMe
Connector	M.2
Form factor	2280
Capacity	16 GB or 32 GB

NOTE: Intel Optane Memory M15 is supported on computers that meet the following requirements:

- 7th Generation or higher Intel Core i3/i5/i7 processors
- Windows 10 64-bit version or higher (Anniversary Update)
- Intel Rapid Storage Technology driver version 17 or higher

Intel Optane Memory H10 with solid-state storage

Intel Optane Memory H10 with solid-state storage functions as both a non-volatile storage cache/accelerator (enabling enhanced read/write speeds for hard-drive storage) and a solid-state storage solution. It neither replaces nor adds to the memory (RAM) installed on your computer.

Table 14. Intel Optane Memory H10 with solid-state storage specifications

Description	Values
Interface	PCIe Gen3.0x4 NVMe
	One PCle Gen3.0x2 for Optane memoryOne PCle Gen3.0x2 for solid-state storage
Connector	M.2
Form factor	2280
Capacity (Optane memory)	Up to 16 GB
Capacity (solid-state storage)	Up to 256 GB

- NOTE: Intel Optane Memory H10 with solid-state storage is supported on computers that meet the following requirements:
 - 9th Generation or higher Intel Core i3/i5/i7 processors
 - Windows 10 64-bit version or higher (Anniversary Update)
 - Intel Rapid Storage Technology driver version 17.2 or higher

Media-card reader

Table 15. Media-card reader specifications

Description	Values	
Туре	One SD card slot	
Cards supported	Secure Digital (SD)Secure Digital High Capacity (SDHC)Secure Digital Extended Capacity (SDXC)	

Keyboard

Table 16. Keyboard specifications

Description	Values
Туре	Backlit keyboard
Layout	QWERTY
Number of keys	United States and Canada: 101 keysUnited Kingdom: 102 keysJapan: 105 keys
Size	X=19.05 mm key pitch Y=18.05 mm key pitch
Shortcut keys	Some keys on your keyboard have two symbols on them. These keys can be used to type alternate characters or to perform secondary functions. To type the alternate character, press Shift and the desired key. To perform secondary functions, press Fn and the desired key. NOTE: You can define the primary behavior of the function keys (F1–F12) changing Function Key Behavior in BIOS setup program.
	Keyboard shortcuts

Camera

Table 17. Camera specifications

Description	Values
Number of cameras	One
Туре	RGB HD camera
Location	Front camera
Sensor type	CMOS sensor technology
Resolution:	
Still image	0.92 megapixel
Video	1280 x 720 (HD) at 30 fps
Diagonal viewing angle	78.6 degrees

Touchpad

Table 18. Touchpad specifications

Description	Values
Resolution:	
Horizontal	3215
Vertical	2429
Dimensions:	
Horizontal	105 mm (4.13 in.)
Vertical	80 mm (3.15 in.)

Touchpad gestures

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

Power adapter

Table 19. Power adapter specifications

Description	Values	
Туре	E4 45W	E4 65W
Diameter (connector)	4.5 mm x 2.9 mm	4.5 mm x 2.9 mm
Input voltage	100 VAC-240 VAC	100 VAC-240 VAC
Input frequency	50 Hz-60 Hz	50 Hz-60 Hz
Input current (maximum)	1.30 A	1.60 A

Description		Values
Output current (continuous)	2.31 A	3.34 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)

Battery

Table 20. Battery specifications

Description	Values
Туре	3-cell "smart" lithium-ion/polymer (42 WHr)
Voltage	11.40 VDC
Weight (maximum)	0.20 kg (0.44 lb)
Dimensions:	
Height	90.73 mm (3.57 in.)
Width	175.47 mm (6.91 in.)
Depth	5.90 mm (0.23 in.)
Temperature range:	
Operating	0°C to 35°C (32°F to 95°F)
Storage	-40°C to 65°C (-40°F to 149°F)
Operating time	Varies depending on operating conditions and can significantly reduce under certain power-intensive conditions.
Charging time (approximate)	4 hours (when the computer is off) (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/.
Life span (approximate)	300 discharge/charge cycles
Coin-cell battery	CR2032
Operating time	Varies depending on operating conditions and can significantly reduce under certain power-intensive conditions.

Display

Table 21. Display specifications

Description	Values	
Туре	High Definition Plus (HD+)	Full High Definition (FHD)

Description	Values	
Panel technology	Twisted Nematic (TN)	Wide Viewing Angle (WVA)
Luminance (typical)	220 nits	300 nits
Dimensions (Active area):		
Height	214.92 mm (8.46 in.)	214.81 mm (8.46 in.)
Width	382.08 mm (15.04 in.)	381.89 mm (15.04 in.)
Diagonal	438.38 mm (17.26 in.)	438.16 mm (17.25 in.)
Native resolution	1600 x 900	1920 x 1080
Megapixels	1.44	2.07
Pixels per inch (PPI)	106	127
Contrast ratio (min)	400:1	500:1
Response time (max)	16 ms	35 ms
Refresh rate	60 Hz	60 Hz
Horizontal view angle	Left: 40 degreesRight: 40 degrees	80 degrees
Vertical view angle	Top: 10 degreesBottom: 30 degrees	80 degrees
Pixel pitch	0.24 mm	0.20 mm
Power consumption (maximum)	4.40 W	8 W
Anti-glare vs glossy finish	Anti-glare	Anti-glare
Touch options	No	No

Fingerprint reader (optional)

Table 22. Fingerprint reader specifications

Description	Values
Sensor technology	Capacitive
Sensor resolution	500 dpi
Sensor area	5.49mm x 4.47 mm
Sensor pixel size	108 x 88

Video

Table 23. Discrete graphics specifications

Discrete graphics

Controller	External display support	Memory size	Memory type
AMD Radeon 610	One HDMI 1.4b port	2 GB	GDDR5

Table 24. Integrated graphics specifications

Integrated graphics

Controller	External display support	Memory size	Processor
Intel UHD graphics 620	One HDMI 1.4b port	Shared system memory	10 th Generation Intel Core i3/i5/i7

Computer environment

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

Table 25. Computer environment

	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)	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 (maximum)	0 m to 3048 m (0 ft to 10000 ft)	0 m to 10668 m (0 ft to 35000 ft)

 $[\]ensuremath{^{*}}$ 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

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 $\mathbf{Fn} + \mathbf{Esc}$. Subsequently, multi-media control can be invoked by pressing \mathbf{Fn} and the respective function key. For example, mute audio by pressing $\mathbf{Fn} + \mathbf{F1}$.

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

Table 26. List of keyboard shortcuts

Function key	Redefined key (for multimedia control)	Behavior
F1	Fn + F1 ≪x	Mute audio
F2	Fn + F2	Decrease volume
F3 🐠	Fn + (F3 (40)	Increase volume
F4 144	Fn + F4	Play previous track/chapter
F5 ▶II	Fn + (F5 ▶ II)	Play/Pause
F6 ▶₩	Fn + F6 → →	Play next track/chapter
F8 💂	Fn + F8	Switch to external display
F9 p	Fn + F9 p	Search
F10	Fn + (F10	Toggle keyboard backlight (optional) NOTE: Non-backlight keyboards have F10 function key without the backlight icon and does not support toggle keyboard backlight function.
F11 **	Fn + (F11 **)	Decrease brightness
F12	Fn + F12	Increase brightness

The ${f Fn}$ key is also used with selected keys on the keyboard to invoke other secondary functions.

Table 27. List of keyboard shortcuts

Function key	Behavior
$Fn = PrtScr_{0 \ M}$	Turn off/on wireless
Fn + B	Pause/Break
Fn + Insert	Sleep
Fn + S	Toggle scroll lock
Fn + H	Toggle between power and battery-status light/hard-drive activity light
Fn + R	System request
Fn + Ctrl	Open application menu
Fn + Esc	Toggle Fn-key lock
Fn + 1 PgUp	Page up
Fn + ↓PgDn	Page down
Fn + ←Home	Home
Fn + End →	End

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 28. Self-help resources

Self-help resources	Resource location
Information about Dell products and services	www.dell.com
My Dell	DELL
Tips	**
Contact Support	In Windows search, type Contact Support, and press Enter.
Online help for operating system	www.dell.com/support/windows
	www.dell.com/support/linux
Troubleshooting information, user manuals, setup instructions, product specifications, technical help blogs, drivers, software updates, and so on.	www.dell.com/support
Dell knowledge base articles for a variety of computer concerns.	 Go to www.dell.com/support. Type the subject or keyword in the Search box. Click Search to retrieve the related articles.
Learn and know the following information about your product:	See Me and My Dell at www.dell.com/support/manuals.
Product specificationsOperating system	To locate the <i>Me and My Dell</i> relevant to your product, identify your product through one of the following:
 Setting up and using your product Data backup Troubleshooting and diagnostics Factory and system restore BIOS information 	 Select Detect Product. Locate your product through the drop-down menu under View Products. Enter the Service Tag number or Product ID in the search bar.

Contacting Dell

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

- (i) 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 on your purchase invoice, packing slip, bill, or Dell product catalog.