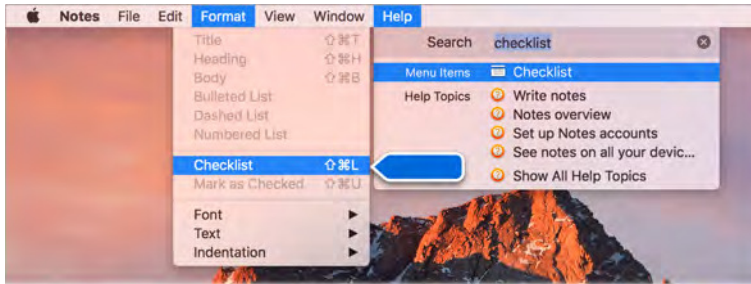


Find out what's new. Click the Help menu, then choose “What's New in macOS” to find out more about the latest features of macOS.

 **Tip:** If you can't remember the location of a menu item in an app, search for it in Help. Place the pointer over the result, and an arrow shows you the command.



Common questions

How do I get support for my MacBook Pro? Go to www.apple.com/support/macbookpro.

Where's my serial number? Choose Apple menu > About This Mac. The serial number is the last item in the list. If your computer isn't turned on, you can find the serial number printed on the bottom of your MacBook Pro.

 **Ask Siri.** Say something like: “What's my computer's serial number?”

How do I get help for an app? When you're using the app, click the Help menu in the menu bar at the top of the screen.

Where is the safety information for my MacBook Pro? See [Important safety information](#).

How do I find the technical specifications? Go to www.apple.com/macbook-pro/specs or choose Apple menu > About This Mac and click the buttons at the top for displays, storage, and memory.

 **Ask Siri.** Ask Siri for information about your Mac. Say something like:

- “How fast is my Mac?”
- “How much memory does my Mac have?”
- “How much free space do I have on my Mac?”
- “How much iCloud storage do I have left?”

How do I check my disk for problems? Use Disk Utility. See the Apple Support article support.apple.com/HT201639.

Keyboard shortcuts

You can press key combinations to do things on your MacBook Pro that you'd normally do with a trackpad, mouse, or other device. Here's a list of commonly used keyboard shortcuts.

Shortcut	Description
Command-X	Cut the selected item and copy it to the Clipboard.
Command-C	Copy the selected item to the Clipboard.
Command-V	Paste the contents of the Clipboard into the current document or app.

Shortcut	Description
Command-Z	Undo the previous command. Press Command-Z again to redo.
Command-A	Select all items.
Command-F	Open a Find window, or find items in a document.
Command-G	Find again, or find the next occurrence of the item you're searching for. Press Command-Shift-G to find the previous occurrence.
Command-H	Hide the windows of the front app. Press Command-Option-H to view the front app but hide all other apps.
Command-M	Minimize the front window to the Dock. Press Command-Option-M to minimize all windows of the front app.
Command-N	Open a new document or window.
Command-O	Open the selected item, or open a dialog to select a file to open.
Command-P	Print the current document.
Command-S	Save the current document.
Command-W	Close the front window. Press Command-Option-W to close all windows of the app.
Command-Q	Quit the app.
Command-Option-Esc	Choose an app to Force Quit.
Command-Tab	Switch to the next most recently used app among your open apps.
Command-Shift-3	Take a screenshot of the entire screen. Press Command-Shift-4 to take a screenshot of a selected area of the screen.

If you switched to the Mac from a PC, or if you like to use the keyboard instead of the trackpad, check out www.apple.com/support/macbasics/pctomac for a list of Mac keyboard shortcuts and the differences between Mac and Windows keyboards. For a more complete list of keyboard shortcuts, see the Apple Support article support.apple.com/HT201236.

More resources, service, and support

You can find more information about your MacBook Pro in System Report, in Apple Diagnostics, and through online resources.

System Report. To get information about your MacBook Pro, use System Report. It shows you what hardware and software is installed, the serial number and operating system version, how much memory is installed, and more. To open System Report, choose Apple menu > About This Mac, then click System Report.

Apple Diagnostics. You can use Apple Diagnostics to help determine if there's a problem with one of the computer's components, such as the memory or processor. Apple Diagnostics helps to identify the potential source of a hardware issue and provides first steps to try and resolve it. Apple Diagnostics will also help you get in touch with Apple Support if you need more help.

Before using Apple Diagnostics, disconnect any external devices, such as a hard disk or external display. Be sure your MacBook Pro is connected to the Internet.

To start Apple Diagnostics, restart your MacBook Pro and hold down the D key as it starts up. If prompted, select the language for your location. Press the Return key or click the right arrow button. The basic Apple Diagnostics test takes a few minutes to complete. If an issue is found, a description of the issue appears in Apple Diagnostics with additional instructions. Make a note of any reference codes before you exit Apple Diagnostics.

Online resources. For online service and support information, go to www.apple.com/support. You can learn about Apple products, view online manuals, and check for software updates. Connect with other Apple users, and get service, support, and professional advice from Apple.

AppleCare support. If you need assistance, AppleCare representatives can help you with installing and opening apps, and with troubleshooting. Call the support center number nearest you (the first 90 days are complimentary). Have the purchase date and your MacBook Pro serial number ready when you call.

Your 90 days of complimentary telephone support begins on the date of purchase.

Country	Phone number	Web address
United States	1-800-275-2273	www.apple.com/support
Australia	(61) 1-300-321-456	www.apple.com/au/support
Canada	1-800-263-3394	English: www.apple.com/ca/support French: www.apple.com/ca/fr/support
Ireland	1-800-804-062	www.apple.com/ie/support
New Zealand	00800-7666-7666	www.apple.com/nz/support
United Kingdom	(44) 0844 209 0611	www.apple.com/uk/support

Telephone numbers are subject to change, and local and national telephone rates may apply. A complete list is available on the web at www.apple.com/support/contact/phone_contacts.html.

Safety, handling, and support

5

Important safety information



WARNING: Failure to follow these safety instructions could result in fire, electric shock, or other injuries, or damage to your MacBook Pro or other property. Read all safety information below before using your MacBook Pro.

Built-in battery. Don't attempt to replace or remove the battery yourself—you may damage the battery, which could cause overheating and injury. The lithium-ion battery in your MacBook Pro should be replaced by Apple or an authorized service provider, and must be recycled or disposed of separately from household waste. Don't expose your MacBook Pro to extreme heat sources, such as radiators or fireplaces, where temperatures might exceed 212°F (100°C).

For information about battery service and recycling, go to www.apple.com/batteries/service-and-recycling.

Handling. Handle your MacBook Pro with care. It is made of metal, glass, and plastic and has sensitive electronic components inside. Place your MacBook Pro on a stable work surface that allows for adequate air circulation under and around the computer. Your MacBook Pro can be damaged if dropped, burned, punctured, or crushed, or if it comes in contact with liquids, oils, and lotions. Don't use a damaged MacBook Pro, such as one with a cracked screen, as it may cause injury.

Liquid exposure. Keep your MacBook Pro away from sources of liquid, such as drinks, oils, lotions, washbasins, bathtubs, shower stalls, and so on. Protect your MacBook Pro from dampness, humidity, or wet weather, such as rain, snow, and fog.

Repairing. Your MacBook Pro doesn't have any user-serviceable parts. Do not open or disassemble MacBook Pro or attempt to repair it or replace any components. Disassembling your MacBook Pro may damage it or may cause injury to you. If your MacBook Pro needs service, is damaged, malfunctions, or comes in contact with liquid, contact Apple or an Apple-authorized repair center, such as an Apple Authorized Service Provider. If you attempt to open your MacBook Pro, you risk damaging your computer, and such damage isn't covered by the limited warranty on your MacBook Pro.

Navigation. Maps, directions, and location-based apps depend on data services. These data services are subject to change and may not be available in all areas, resulting in maps, directions, or location-based information that may be unavailable, inaccurate, or incomplete. Compare the information provided on your MacBook Pro to your surroundings and defer to posted signs to resolve any discrepancies. Do not use these services while performing activities that require your full attention. Always comply with posted signs and the laws and regulations in the areas where you are using your MacBook Pro and always use common sense.

Charging. Charge MacBook Pro only with the included USB-C Charge Cable and 61W or 87W USB-C Power Adapter, or with other third-party USB-C charge cables and USB-C power adapters that are compliant with applicable regulations.

Using damaged cables or chargers, or charging when moisture is present, can cause fire, electric shock, injury, or damage to your MacBook Pro or other property. When you use the included USB-C Charge Cable and 61W or 87W USB-C Power Adapter to charge your MacBook Pro, make sure the AC plug is fully inserted into the power adapter before you plug the adapter into a power outlet. You will hear and may feel a vibration when it connects.

Prolonged heat exposure. Your MacBook Pro and its 61W or 87W USB-C Power Adapter may become very warm during normal use. The MacBook Pro and its 61W or 87W USB-C Power Adapter comply with applicable surface temperature standards and limits defined by the International Standard for Safety of Information Technology Equipment (IEC 60950-1). However, even within these limits, sustained contact with warm surfaces for long periods of time may cause discomfort or injury.

Use common sense to avoid situations where your skin is in prolonged contact with a device or its power adapter when it's operating or plugged into a power source. For example, don't sleep with a device or power adapter when it's plugged into a power source. Don't operate your MacBook Pro on a pillow, blanket, or other soft material that can block ventilation openings. It's important to keep your MacBook Pro and its 61W or 87W USB-C Power Adapter in a well-ventilated area when in use or charging.

Never push anything into the ventilation openings, as doing so may be dangerous and cause your computer to overheat. Never place anything over the keyboard when operating your MacBook Pro. If your MacBook Pro is on your lap and gets uncomfortably warm, remove it from your lap and place it on a stable, well-ventilated work surface. Take special care if you have a physical condition that affects your ability to detect heat against the body.

61W or 87W USB-C Power Adapter. To operate the 61W or 87W USB-C Power Adapter safely and reduce the possibility of heat-related injury or damage, do one of the following:

- Plug the 61W or 87W USB-C Power Adapter directly into a power outlet.
- If you're using an AC power cord such as the Apple Power Adapter Extension Cable, sold separately, place the power adapter on a desk, table, or on the floor in a well-ventilated location.

Disconnect the power adapter and any cables if any of the following conditions exists:

- You want to clean the case (use only the recommended procedure, described in [Important handling information](#)).
- The power cord or plug becomes frayed or otherwise damaged.
- Your MacBook Pro or 61W or 87W USB-C Power Adapter is exposed to rain, excessive moisture, or liquid spilled into the case.
- Your MacBook Pro or 61W or 87W USB-C Power Adapter has been dropped, the case has been damaged, or you suspect that service or repair is required.

61W USB-C Power Adapter specifications:

- *Frequency:* 50 to 60 Hz, single phase
- *Line Voltage:* 100 to 240 V
- *Output Voltage:* 20.3 V, 3 A (USB PD) or 9 V, 3 A (USB PD) or 5.2 V, 2.4 A

87W USB-C Power Adapter specifications:

- *Frequency:* 50 to 60 Hz, single phase
- *Line Voltage:* 100 to 240 V
- *Output Voltage:* 20.2 V, 4.3 A (USB PD) or 9 V, 3 A (USB PD) or 5.2 V, 2.4 A

Take special care if you have a physical condition that affects your ability to detect heat against the body.

Hearing loss. Listening to sound at high volumes may damage your hearing. Background noise, as well as continued exposure to high volume levels, can make sounds seem quieter than they actually are. Use only compatible earbuds, headphones, or earpieces with your MacBook Pro. Turn on the audio and check the volume before inserting anything into your ear. For more information about hearing loss, see www.apple.com/sound.



WARNING: To prevent possible hearing damage, do not listen at high volume levels for long periods.

Radio frequency exposure. MacBook Pro uses radio signals to connect to wireless networks. For information about radio frequency (RF) energy resulting from radio signals and steps you can take to minimize exposure, see www.apple.com/legal/rfexposure.

Medical device interference. MacBook Pro contains components and radios that emit electromagnetic fields, which may interfere with pacemakers, defibrillators, or other medical devices. Maintain a safe distance of separation between your medical device and MacBook Pro. Consult your physician and medical device manufacturer for information specific to your medical device. If you suspect MacBook Pro is interfering with your pacemaker or any other medical device, stop using MacBook Pro.

Medical conditions. If you have a medical condition that you believe could be affected by using MacBook Pro (for example, seizures, blackouts, eyestrain, or headaches), consult with your physician prior to using MacBook Pro.

Repetitive motion. When you perform repetitive activities such as typing or playing games on MacBook Pro, you may experience discomfort in your hands, arms, wrists, shoulders, neck, or other parts of your body. If you experience discomfort, stop using MacBook Pro and consult a physician.

Choking hazard. Some MacBook Pro accessories may present a choking hazard to small children. Keep these accessories away from small children.

High-consequence activities. Your MacBook Pro is not intended for use where the failure of the computer could lead to death, personal injury, or severe environmental damage.

Explosive atmospheres. Charging or using your MacBook Pro in any area with a potentially explosive atmosphere, such as areas where the air contains high levels of flammable chemicals, vapors, or particles (such as grain, dust, or metal powders), may be hazardous. Obey all signs and instructions.

Important handling information

Operating environment. Operating your MacBook Pro outside these ranges may affect performance:

- *Operating temperature:* 50° to 95° F (10° to 35° C)
- *Storage temperature:* -13° to 113° F (-25° to 45° C)
- *Relative humidity:* 0% to 90% (noncondensing)
- *Operating altitude:* Tested up to 10,000 feet (0 to 3048 meters)

Carrying your MacBook Pro. If you carry your MacBook Pro in a bag or briefcase, make sure there are no loose items (such as paper clips or coins) that could accidentally get inside the computer through vent openings or get stuck inside a port.

Using connectors and ports. Never force a connector into a port. When connecting a device, make sure the port is free of debris, that the connector matches the port, and that you have positioned the connector correctly in relation to the port.

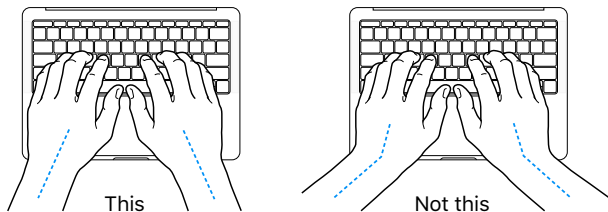
Storing your MacBook Pro. If you are going to store your MacBook Pro for an extended period of time, keep it in a cool location (ideally, 71° F or 22° C) and discharge the battery to 50 percent. When storing your computer for longer than five months, maintain the capacity of the battery by charging the battery to 50 percent every six months or so.

Cleaning your MacBook Pro. When cleaning the outside of your MacBook Pro and its components, first shut down your MacBook Pro, then unplug the USB-C Charge Cable and the 61W or 87W USB-C Power Adapter. Then dampen a clean, soft, lint-free cloth to wipe the MacBook Pro exterior. Avoid getting moisture in any openings. Don't spray liquid directly on the computer. Don't use aerosol sprays, solvents, abrasives, or cleaners containing hydrogen peroxide that might damage the finish.

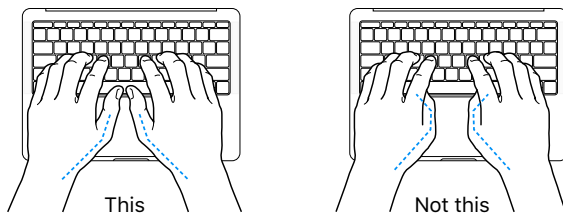
Cleaning the MacBook Pro screen. To clean your MacBook Pro screen, first shut down your MacBook Pro and unplug the USB-C Charge Cable and the 61W or 87W USB-C Power Adapter. Dampen a clean, soft, lint-free cloth with just water and wipe the screen. Don't spray liquid directly on the screen.

Understanding ergonomics

When you use the keyboard and mouse, your shoulders should be relaxed. Your upper arm and forearm should form an angle that is slightly greater than a right angle, with your wrist and hand in roughly a straight line.



Use a light touch when typing or using the trackpad and keep your hands and fingers relaxed. Avoid rolling your thumbs under your palms.



Change hand positions often to avoid fatigue. Some computer users might develop discomfort in their hands, wrists, or arms after intensive work without breaks. If you begin to develop chronic pain or discomfort in your hands, wrists, or arms, consult a qualified health specialist.

External mouse. If you use an external mouse, position the mouse at the same height as the keyboard and within a comfortable reach.

Chair. An adjustable chair that provides firm, comfortable support is best. Adjust the height of the chair so your thighs are horizontal and your feet are flat on the floor. The back of the chair should support your lower back (lumbar region). Follow the manufacturer's instructions for adjusting the backrest to fit your body properly.

Built-in display. Adjust the angle of the display to minimize glare and reflections from overhead lights and windows. Do not force the display if you meet resistance. The display is not designed to open past 135 degrees.

You can adjust the brightness of the screen when you take the computer from one work location to another, or if the lighting in your work area changes.

For more information about ergonomics, see www.apple.com/about/ergonomics.

Regulatory information

Regulatory information, certification, and compliance marks specific to MacBook Pro are available on-device. Choose Apple menu > About This Mac and click Support. Choose Important Information, then choose Regulatory Certification.

FCC regulatory compliance

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Important: Changes or modifications to this product not authorized by Apple could void the electromagnetic compatibility (EMC) and wireless compliance and negate your authority to operate the product.

This product has demonstrated EMC compliance under conditions that included the use of compliant peripheral devices and shielded cables (including Ethernet network cables) between system components. It is important that you use compliant peripheral devices and shielded cables between system components to reduce the possibility of causing interference to radios, television sets, and other electronic devices.

If necessary, contact Apple or take your MacBook Pro to an Apple-authorized repair center, such as an Apple Authorized Service Provider. Or consult an experienced radio/television technician for additional suggestions.

Responsible party (contact for FCC matters only):
Apple Inc. Corporate Compliance
1 Infinite Loop, MS 91-1EMC
Cupertino, CA 95014

Canadian regulatory compliance

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Operation in the band 5150–5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems.

Users are advised that high-power radars are allocated as primary users (that is, priority users) of the bands 5250–5350 MHz and 5650–5850 MHz and these radars could cause interference and/or damage to LE-LAN devices.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

La bande 5150–5250 MHz est réservée uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux.

Les utilisateurs sont avisés que les utilisateurs de radars de haute puissance sont désignée utilisateurs principaux (c.-à-d., qu'ils ont la priorité) pour les bandes 5250–5350 MHz et 5650–5850 MHz et que ces radars pourraient causer du brouillage et/ou des dommages aux dispositifs LAN-EL.

Industry Canada Statement

Complies with CAN ICES-3 (B)/NMB-3(B).

EU compliance statement



Hereby, Apple Inc. declares that this wireless device is in compliance with the essential requirements and other relevant provisions of the R&TTE Directive.

A copy of the EU Declaration of Conformity is available at www.apple.com/euro/compliance.

Apple's EU representative is Apple Distribution International, Hollyhill Industrial Estate, Cork, Ireland.

This device can be used in the European Community.

European Community Restrictions

This device is restricted to indoor use in the 5150 to 5350 MHz frequency range.

ENERGY STAR® compliance statement



As an ENERGY STAR partner, Apple has determined that standard configurations of this product meet the ENERGY STAR guidelines for energy efficiency. The ENERGY STAR program is a partnership with electronic equipment manufacturers to promote energy-efficient products. Reducing energy consumption of products saves money and helps conserve valuable resources.

MacBook Pro is shipped with power management enabled, with the computer set to sleep after 10 minutes of user inactivity. To wake your computer, click the trackpad or press any key on the keyboard. To change this setting, click the System Preferences icon  in the Dock, then click Energy Saver.

For more information about ENERGY STAR, go to www.energystar.gov.

Apple and the environment

At Apple, we recognize our responsibility to minimize the environmental impacts of our operations and products.

For information, go to www.apple.com/environment.

Regional disposal and recycling information



This symbol indicates that this product and/or battery should not be disposed of with household waste. When you decide to dispose of this product and/or its battery, do so in accordance with local environmental laws and guidelines.

For information about Apple's recycling program, recycling collection points, restricted substances, and other environmental initiatives, visit www.apple.com/environment.

Información sobre eliminación de residuos y reciclaje

El símbolo de arriba indica que este producto y/o su batería no debe desecharse con los residuos domésticos. Cuando decida desechar este producto y/o su batería, hágalo de conformidad con las leyes y directrices ambientales locales. Para obtener información sobre el programa de reciclaje de Apple, puntos de recolección para reciclaje, sustancias restringidas y otras iniciativas ambientales, visite www.apple.com/la/environment o www.apple.com/mx/environment.

Brasil—Informações sobre descarte e reciclagem

O símbolo acima indica que este produto e/ou sua bateria não devem ser descartados no lixo doméstico. Quando decidir descartar este produto e/ou sua bateria, faça-o de acordo com as leis e diretrizes ambientais locais. Para informações sobre substâncias de uso restrito, o programa de reciclagem da Apple, pontos de coleta e telefone de informações, visite www.apple.com/br/environment.

European Union—Disposal Information

The symbol above means that according to local laws and regulations your product and/or its battery shall be disposed of separately from household waste. When this product reaches its end of life, take it to a collection point designated by local authorities. The separate collection and recycling of your product and/or its battery at the time of disposal will help conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment.

Battery disposal information

The battery in your MacBook Pro should be serviced, replaced, or recycled by Apple or an authorized service provider, and must be recycled or disposed of separately from household waste according to your local environmental laws and guidelines. For information about battery service and recycling, go to www.apple.com/batteries/service-and-recycling.

Battery Charger Energy Efficiency



Software License Agreement

Use of MacBook Pro constitutes acceptance of the Apple and third-party software license terms found at www.apple.com/legal/sla.

Apple Inc.

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www.apple.com

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Some apps are not available in all areas. App availability is subject to change.

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