Optimize storage. Set options in the Recommendations pane. Go to Apple menu > About This Mac, click Storage, then click Details. When your Mac is low on storage, you'll see an alert that will open the Recommendations pane.



Set options to:

- Optimize iCloud Storage:
 - Store files in iCloud, where they stay secure and available. You can turn on iCloud Drive to store files on your desktop and in your Documents folder in iCloud.
 - Turn on iCloud Photo Library to store items from the Photos app in iCloud. Even though your files are stored in the cloud, you can get access to them right where you left them on your Mac. For more information, see Access your content anywhere with iCloud.
- Optimize Storage: Remove iTunes movies and TV shows you've watched, and keep only recent email attachments.
- Erase Trash Automatically: Automatically erase items that have been in the Trash for more than 30 days.
- Reduce Clutter: Review documents and delete older ones stored on your MacBook Pro.

macOS Sierra also prevents you from downloading the same file twice from Safari, alerts you to remove installer software when you finish installing a new app, clears logs and caches that are safe to remove when you're low on storage, and more, to help you save space as you work.

Back up and restore

To keep your files safe, it's important to back up your MacBook Pro regularly. The easiest way to back up is to use Time Machine—which is built into your MacBook Pro—with a wireless AirPort Time Capsule (sold separately), or an external storage device connected to your MacBook Pro.

Files stored in iCloud Drive and photos in iCloud Photo Library are automatically backed up to iCloud and don't need to be part of your Time Machine or other backup.

Set up Time Machine. Make sure your MacBook Pro is on the same Wi-Fi network as your AirPort Time Capsule, or connect your AirPort Time Capsule or external storage device to your MacBook Pro. Click the System Preferences icon in the Dock, click Time Machine, then click On. Select the drive you want to use for backup, and you're all set.



Time Machine:

- Automatically backs up everything on your MacBook Pro, including system files, apps, accounts, preferences, music, photos, movies, and documents.
- Remembers how everything looked on any given day, so you can revisit your MacBook Pro as it appeared in the past or retrieve an older version of a document.
- Lets you restore your MacBook Pro from a Time Machine backup. So if anything happens to your MacBook Pro, your files and settings are safe and sound.

To learn more about backing up and restoring your MacBook Pro, go to Mac Help (see Mac Help) and search for "Time Machine," "external storage device," "backup," or "restore." To learn more about AirPort Time Capsule, go to www.apple.com/airport-time-capsule.

AirPort Time Capsule is sold separately at apple.com or your local Apple Store.

Apps 3

Included apps

Your MacBook Pro comes with a collection of great apps for things you do every day, like surfing the web, sending mail and messages, and arranging your calendar. It also comes with apps like Photos, iMovie, GarageBand, Pages, Numbers, and Keynote—so you can be creative and productive right from the start. The apps that come with your MacBook Pro are described in the following sections.



Find even more apps. Click the App Store icon in the Dock to find apps for everything you want to do. See App Store to learn more.

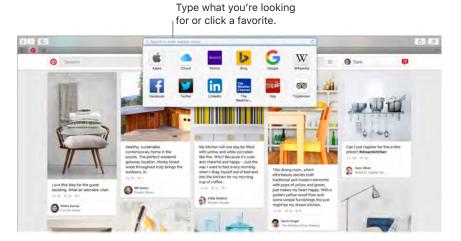
Use the Touch Bar. If your MacBook Pro includes a Touch Bar, you can use it to perform shortcuts for common tasks. Learn more in the app sections that follow.

Get help for any app. Click the Help menu (in the menu bar at the top of the screen) when you're using the app.



Safari is the fastest, safest, and most energy-efficient way to surf the web on your Mac.

Start searching. Click the Smart Search field at the top of the window to see websites you visit most frequently. Or start typing a word or website address—Safari shows you matching websites, as well as Safari Suggestions for news, Wikipedia articles, iTunes music, weather forecasts, sports scores and player stats, stock prices, help from Apple, and nearby points of interest.



Spread the word. It's easy to share a webpage on social media, save it to your bookmarks or reading list, or add it to Notes or Reminders. Just click the Share button $\hat{\Box}$ at the top of the window and choose an option.

View multiple pages in one window. Click + at the far right of the tab bar to open a new tab, then enter an address. To keep a website handy, drag its tab left to "pin" it, and it stays put in the tab bar.



See what's open on each of your devices. You can see open webpages on all your devices that are signed in to the same iCloud account. Just click the Show All Tabs button \Box at the top of the window and scroll down if necessary.

Read without distraction. If the article you're reading includes animations or flashy ads, you can use Reader view to strip out the distractions and focus on the text. Click the Reader button \equiv in the Smart Search field (if it's available).

Tip: In a webpage, force click a word to see its definition or a Wikipedia article, if one is available. Try force clicking text in other apps, like Messages or Mail, to get more info.

Shop with Apple Pay. When you're shopping online on a supported website, click the Apple Pay button to make a purchase. To complete the transaction, use Touch ID or the passcode on your iPhone, or double-click the side button on your unlocked Apple Watch. If you're using a MacBook Pro that has Touch ID, use the Power button with Touch ID to complete your purchase.

Use the Touch Bar. Tap the Search field in the Touch Bar, then tap a favorite to open it. Click 🗊 to open a new tab.



Click the right and left arrow buttons to go backward or forward. Tap the tab scrubber in the Touch Bar to move between open tabs.



Customize the Touch Bar to add your favorite controls (choose View > Customize Touch Bar).



See Customize the Touch Bar for more information.



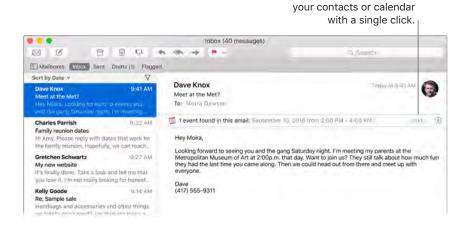
Mail lets you manage all your email accounts from a single app. It works with most popular email services, such as iCloud, Gmail, Yahoo Mail, and AOL Mail.

One-stop email. Tired of signing in to multiple websites to check your email accounts? Set up Mail with all your accounts so you can see all your messages in one place. Choose Mail > Add Account.

O Ask Siri. Say something like: "Any new mail from Laura today?"

Add events and contacts right from Mail. When Mail detects a new email address or event in a message, just click Add to add it to Contacts or Calendar. Force click an address to see a preview of the location, which you can open in Maps.

Add names or events to



Never miss an email. Check the Mail icon in the Dock to see the number of unread messages. When you get new email, a notification also appears at the top-right of the screen so you can quickly preview the new messages. (Don't want notifications? To turn them off, click the System Preferences icon in the Dock, then click Notifications.)

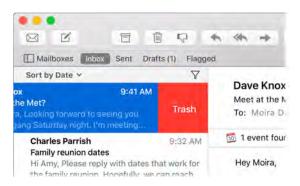


Use the Touch Bar. Use the Touch Bar for many common tasks, like composing, replying, archiving, flagging, marking as junk, and moving messages.



Customize the Touch Bar to add your favorite controls (choose View > Customize Touch Bar). See Customize the Touch Bar for more information.

Tip: To quickly delete a message in your inbox, swipe left across the message with two fingers on the trackpad, then click Trash. Or swipe right to mark the message as Unread.

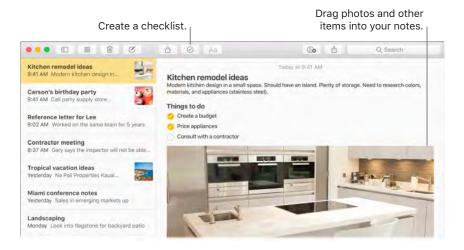




Notes are more than just text. Add a checklist, and check off items as you complete them. Or add photos, videos, and content from other apps, such as a web link from Safari or a location from Maps.

Ask Siri. Say something like: "Create a new note."

Check off tasks. Click the Checklist button \bigcirc to add an interactive checklist to a note—perfect for completing a to-do list or working through a recipe.



Tip: When you're signed in to iCloud, your notes are kept up to date on all your devices—so you can create a to-do list on your Mac, then check off items on your iPhone while you're on the go.

Add photos, videos, and more. Click the Photos button to add items from your Photos library to a note. Or drag a photo, video, PDF, or other document from the desktop.

Sort notes. You can sort your notes by Date Created, Date Edited, or Title. Select "All iCloud," "Notes," or a folder, then choose View > Sort Notes By and select a sort option.

Lock a note. You can lock a note with a password to make sure that only those who know the password can see the note. Choose Notes > Set Password to assign a password to use with all locked notes. Then select the note you want to lock, and choose File > Lock Note.

Share a note. You can invite people to view and edit your notes by sharing them. Click the People button **and select a method for sending the link.**

Use the Touch Bar. Tap \checkmark to create a new note. Tap \checkmark to add a checklist item to your note.



Tap predictive input options and tap > to display text formatting buttons to align text left or right, and apply bold, italic, or underscore styles.



Tap Aa to add note paragraph styles, like numbered or bulleted lists, or headings.



Messages

With Messages, it's easy to stay in touch. Connect with one or more people through text, audio, or video. And if you want to share files, you can do that too.



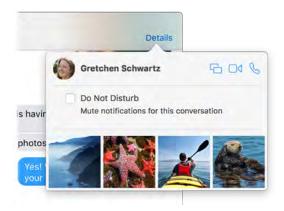
Sign in and send. Sign in with your Apple ID to exchange unlimited iMessage texts—including text, photos, live photos, video, and more—with anyone with a Mac, iPhone, iPad, iPod touch, or Apple Watch.

Tip: You can also send and receive SMS and MMS messages on your Mac, so you can text friends with an iPhone from your Mac, if your iPhone (with iOS 8.1 or later) is signed in to Messages with the same Apple ID. On your iPhone, go to Settings & Messages, tap Message Forwarding, then tap the name of your Mac to turn on Text Message Forwarding. On your Mac, you'll see an activation code. Enter this on your iPhone, then tap Allow.

O Ask Siri. Say something like: "Read my last message from Mitch."

Make messages fun. Liven up discussions by responding to messages with large emoji or Tapbacks. To add a Tapback, force click or control-click a message bubble, then choose Tapback. And look out for stickers, Digital Touch, invisible ink, and handwritten messages that your friends send you from their iOS device or Apple Watch.

When a text isn't enough. If your friend also has FaceTime, you can start a FaceTime video or audio chat right from a conversation in Messages. Just click Details in the message window, then click the Audio or Video button.



Share your screen. You can share your screen with a friend—and vice versa—and even open folders, create documents, and copy files by dragging them to the desktop on the shared screen. Click Details, then click the Screen Share button .

Use the Touch Bar. Tap \(\vec{\psi} \) to create a new message. Tap the predictive input options in Touch Bar to add words, and tap \(\oint) \) to open the emoji picker and add emoji to your message. Click a message in the thread to see Tapbacks on the Touch Bar, and tap to add them.





Never miss an appointment with Calendar. Keep track of your busy schedule by creating multiple calendars, and manage them all in one place.

Create events. Click + to add a new event. To invite someone, double-click the event, click the Add Invitees section, then type an email address. Calendar lets you know when your invitees reply.



See all your calendars—or just a few. Click the Calendars button to see a list of all your calendars; click the ones you want to see in the window.

Ask Siri. Say something like: "Set up a meeting with Mark at nine in the morning."

A calendar for every part of your life. Create separate calendars—for example, for home, work, and school—each with its own color. Choose File > New Calendar to create a calendar, then Control-click each calendar to choose a new color.



Share across your devices and with others. When you're signed in to iCloud, your calendars are kept up to date on all your Macs, iOS devices, and Apple Watch. You can also share calendars with other iCloud users.

Use the Touch Bar. Tap the Today button to view or edit today's events, and a slider to select the month—past or future.



Select an event in your calendar, and tap buttons to get the event details, edit the time and place, and add or delete invitees.



Tip: If you add a location to an event, Calendar shows you a map, estimated travel time and time to leave, and even the weather forecast. Force click any event in Calendar to see more details.



Use Photos to organize, edit, and share your photos, live photos, and videos, and keep your entire photo library up to date on all your devices with iCloud Photo Library. You can also create slideshows and beautiful photo gifts.



Relive meaningful moments. Click Memories to see favorite and forgotten occasions from your photo library. Memories automatically creates photo collections from events like a wedding or family vacation.

Find the perfect shot. Search your photos based on what's in them. Photos identifies objects, scenes, and people, so you don't have to use keywords to tag each photo.

Ask Siri. "Show me pictures of Sally at the beach."

Tip: You can add location info to any photo. While viewing the photo, click the Info button ①, click Assign a Location, then start typing. Choose your location in the list, or type it and press Return.

See who's in your photo albums. The People feature automatically organizes your photo library by people in your photos. The People album is arranged by how often each person appears in your library. Make someone a favorite by dragging their photo to the top and they'll always appear at the top of the album.

See where you've been. Click the Places album to view your photo collection on a world map. You can zoom in to see exactly where you took each shot.

Use the Touch Bar. The Touch Bar displays a scrubber organized by year, which speeds your search for just the right photo. You can also quickly tap to rotate a selected photo \Box or mark it as a favorite \heartsuit . Tap \Longrightarrow to display the editing controls.



Select a photo to edit it. Tap == to view editing options (crop, filters, adjust, retouch, and red-eye), and tap the X when you finish.



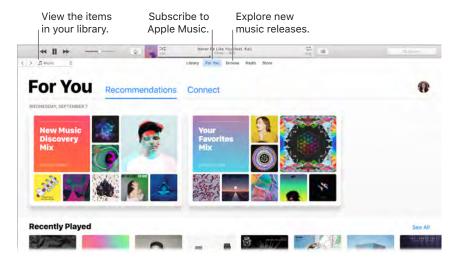
Tap it to enhance a photo, and tap and hold to view the before and after effects of your edits. Adjust the red-eye and resize the photo. When you're happy with your changes, tap Done.





iTunes makes it easy to organize and enjoy the music, movies, and TV shows you have—and shop for the ones you want. iTunes includes Apple Music (which lets you listen to millions of songs on demand), Beats 1 live radio, and Connect, a fun way for fans and artists to interact.

It's in your library. Your iTunes library contains your music, movies, TV shows, podcasts, iTunes U content, audiobooks, apps, ringtones, and Internet radio. Click the menu in the top-left corner to change views.



Find your new favorite song. Click For You to browse albums and playlists recommended for you based on the artists and genres you love. The reorganized, easy-to-understand sections highlight why each album or playlist was selected for you. For You also shows posts from artists you follow, so it's easier than ever to discover new music.

Browse the best of Apple Music. Click Browse to see new music and exclusive releases from Apple Music. Choose from a huge selection of playlists to find the perfect mix for any moment.

Tune in. Click Radio to tune in to Beats 1 live or listen to any episode from the Beats 1 family of shows. Explore the wide variety of music-only stations created for almost every genre of music.

Ask Siri. "Play NPR Radio."

Use the Touch Bar. {need info; haven't seen any content in DFR yet}

Tip: To play music or radio from a speaker using AirPlay, click the AirPlay icon in the menu bar and select an available speaker.



Make video and audio calls from your Mac with FaceTime.

Ask Siri. Say something like: "Make a FaceTime call to Sharon."

Video or audio only? Click the Video button to make a FaceTime video call. If it's not convenient to make a video call, click the Audio button to make an audio-only call.

Tip: While a video call is in progress, you can drag the small picture-in-picture window to any corner of the FaceTime window.



List of recent calls.

Leave a message. If your FaceTime video call is declined or unanswered, click Message to send an iMessage.

Make a phone call. If you have an iPhone with iOS 8 or later, make phone calls right from your Mac using FaceTime. Just make sure your Mac and iPhone are signed in to the same iCloud account and have the feature turned on. (On your Mac, open FaceTime, choose FaceTime > Preferences, then select "Calls from iPhone.")

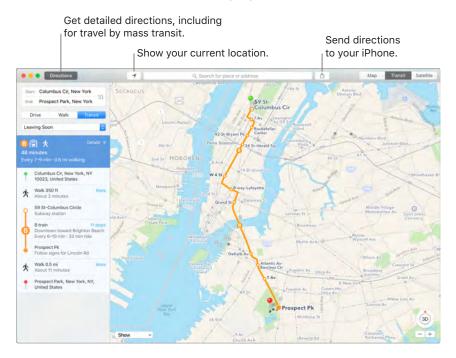
Note: A Wi-Fi connection is required in order to make or receive calls on your MacBook Pro.

Use the Touch Bar. Make and answer voice or video calls, get info about a caller, and send a message when you can't talk, all from the Touch Bar.





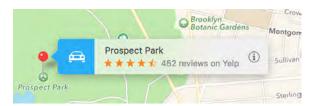
Get directions and view locations using a map or a satellite image. Or use Flyover to view select cities in 3D. Force click a location to drop a pin there.



Let iPhone show you the way. Click Directions to find the best route to your destination, then click the Share button to send the directions to your iPhone for turn-by-turn voice navigation.

Get there on public transit. Maps provides public transit information for select cities. Click Transit, then click a destination to get suggested travel routes and estimated travel time.

More than just maps. For local points of interest such as hotels and restaurants, Maps shows you phone numbers, photos, and even reviews.



Ask Siri. Say something like: "Find coffee near me."

WARNING: For important information about navigation and avoiding distractions that could lead to dangerous situations, see Important safety information.

Use the Touch Bar. Specify your current location \mathcal{I} on the map and open the search field to enter where you want to go. Tap the Directions button to get the route.



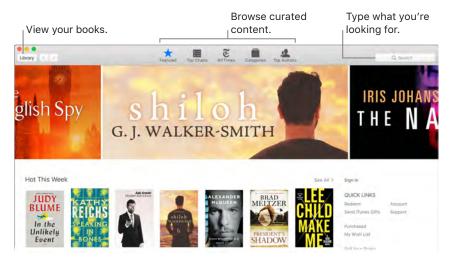
Tip: Maps can show you what traffic is like in both Map and Satellite view. Click Show, then choose Show Traffic.



Use iBooks to read and organize your library of books, and to purchase new books on your Mac.

A bookshelf right on your Mac. Browse or search all the items in your library—or click iBooks Store to find new books and other publications. To buy, just sign in with your Apple ID: Choose Store > Sign in.

Ask Siri. Say something like: "Find books by Jane Austen."

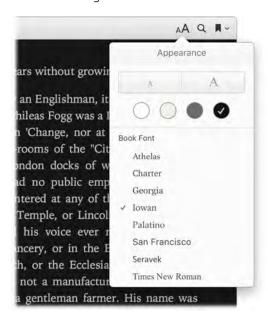


Never lose your place or your markups. Your purchased books, collections, highlights, notes, bookmarks, and the current page are available automatically on your Mac and iOS devices, if you're signed in on them with the same Apple ID.

Find your way back. You can quickly go to pages you've bookmarked. Click the arrow next to to view your list of bookmarks.

Use the Touch Bar. {need info}

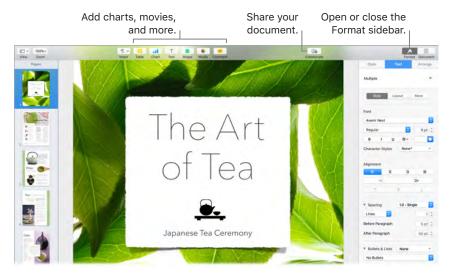
Tip: Change to Night mode to read more easily in low-light situations. Choose View > Theme, then choose Night. Or click the Fonts button AA, then click the black circle.





Use the Pages app to create stunning, media-rich documents on your Mac. Open and edit Microsoft Word files, and easily share a link to your work in Mail or Messages, right from the toolbar.

Look good! Pages includes a variety of beautiful templates for flyers, newsletters, reports, and résumés, among others, making it easy to start your project.



All your formatting tools, in one place. Click the Format button A in the toolbar to open the Format inspector. Select an item in your document, and the formatting options for it appear.

Flow text around graphics. When you add an image to a text document, the text flows automatically around the image. You can fine-tune how the text wraps in the Format sidebar.





Move a graphic into a text block...

...and the text wraps around the graphic automatically.

Start on your Mac, finish on iPad. You can keep documents up to date across all your devices when you sign in to iCloud with the same Apple ID. So you can start composing on one device, and pick up where you left off on another.

Tip: Turn on change tracking to see the changes you and others make to the document. Each person's edits and comments are color-coded so you can see who made the change. Choose Edit > Turn on Tracking to show the change tracking toolbar.

Use the Touch Bar. Tap to align text left or right, and to add predictive text. Tap \rangle to see more formatting options.



Tap to choose text color, style options (bold, italic, and so on), line spacing, and bullet and list formats. Tap (to return to predictive input.



Tap Styles to see paragraph style format options, like Title, Subtitle, and Heading.

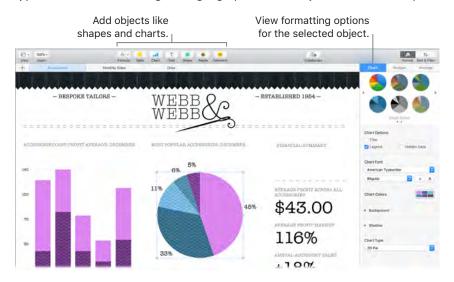


Numbers

Use Numbers to create attractive and powerful spreadsheets on your Mac. More than 30 Appledesigned templates give you a head start creating budgets, invoices, team rosters, and more. Numbers can also open and export Microsoft Excel spreadsheets.

Ask Siri. Say something like: "Open a new spreadsheet."

Start with a template—then add what you want. Select the sample text in the template, then type new text. To add images, drag a graphic file from your Mac onto the placeholder image.



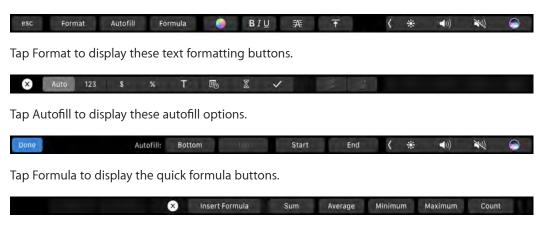
Get organized with sheets. Use multiple sheets or tabs to show different views of your information. For example, use one sheet for your budget, another for a table, and a third for notes. Click + to add a new sheet. Drag a tab left or right to reorder sheets.



Formulas are a snap. Get built-in help for more than 250 powerful functions—just type the equal sign (=) in a cell, and you see a list of all the functions and their descriptions in the sidebar. Start typing a formula to get instant suggestions.

(v) Tip: To get instant calculations based on a series of values, select the range of cells containing the values. At the bottom of the window you'll see the sum, average, minimum, maximum, and count of the selected values. Click the Settings button **(x)** to see even more options.

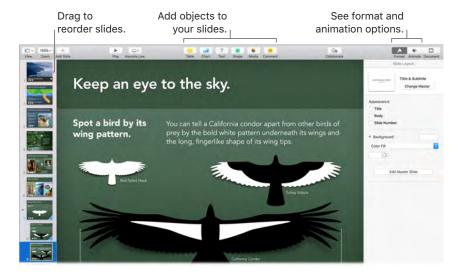
Use the Touch Bar. Tap Format, Autofill, and Formula to display the options shown below, or tap text style and format buttons to display more Touch Bar controls for choosing color, justification, wrapping, and top/bottom alignment for text.



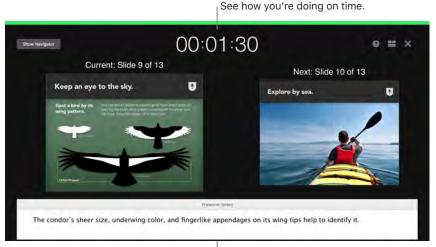
Keynote

Create professional, cutting-edge presentations with Keynote. Start with one of the more than 30 predesigned themes and make it your own by adding text, new objects, and changing the color scheme.

Organize visually. Use the slide navigator on the left to quickly add, delete, or rearrange slides. Click a slide to see it in the main window, drag a slide to change its order, or select it and press Delete to remove it.



Practice makes perfect. To rehearse your presentation, choose Play > Rehearse Slideshow. You'll see each slide along with your notes—and a clock to keep you on track.



Remind yourself of key points to make.

Share your presentation. If your manager wants to review your presentation or you want to share it with others on a conference call, click Share > Send a Copy to send a copy by Mail, Messages, AirDrop, or even social media.

Follow the bouncing ball. Get their attention by animating an object on a slide. Select the object, click Animate in the toolbar, click Action in the sidebar, then click Add an Effect.

Tip: You can embed a video in your presentation. Click where you want it to be, then click the Media button ♣ in the toolbar. Click Movies, then find the movie you want and drag it to your slide.

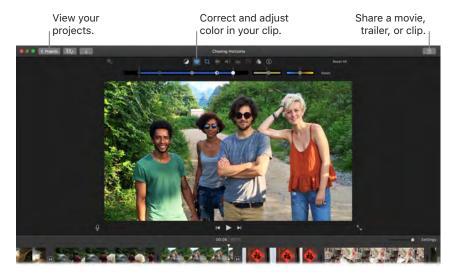
Use the Touch Bar. Tap the arrow keys to move up and down through your slides, tap buttons to zoom or skip a slide, and tap to group or ungroup slides.





iMovie lets you turn your home videos into beautiful movies and epic Hollywood-style trailers, and makes it easy to share your clips.

Import a video. Import video or photos from your iPhone, iPad, or iPod touch, from a camera, or from media files already on your Mac. iMovie creates a new library and event for you.



Record video with the built-in camera. Use the FaceTime camera on your Mac to record video and add it to your project. Select an event in the sidebar, click Import in the toolbar, select FaceTime HD Camera (Built-in), then click the Record button to start and stop recording.

Tip: Shooting video with a handheld device can produce shaky results, but you can stabilize the video so the playback is smoother. Select the shaky clip in the timeline, click the Stabilization button , then click Stabilize Shaky Video.

Create Hollywood-style trailers. Make clever trailers, complete with titles and music. Just add your own movie clips and customize the credits. Click the New button +, click Trailer, then choose a template from the Trailer window. Click Create, select the event you want to use, type a name, then click OK.



Use the Touch Bar. Tap buttons to mark a favorite clip, delete, play, add a clip to a movie, or add as an overlay.



When a clip is playing, use the Touch Bar buttons to rewind, play, fast-forward, and split the clip into two parts, at the point where you click. Tap the volume button to open the volume slider.





GarageBand is an app for creating, recording, and sharing your music. It has everything you need in order to learn to play an instrument, write music, or record a song—your own home recording studio.

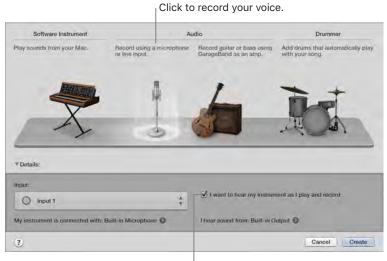
Create a new project. You can start with a song template, select a tempo, key, and other options, then click Record and start playing. Build your song—for example, with different tracks and loops. Click Quick Help ② and hold the pointer over items to learn what they are and how they work.



No more excuses—learn to play. GarageBand comes with a lesson to start learning piano and one for guitar. Open the Lesson Store in the Project Chooser to view more lessons to download or purchase—including Artist Lessons from famous musicians.



Record your voice. Connect a microphone, choose Track > New Track, then select the microphone under Audio. Click the triangle next to Details to set options for input, output, and monitoring, then click Create. Click the Record button to start recording or the Play button to stop recording. Don't forget to sing!



Hear yourself while you record.

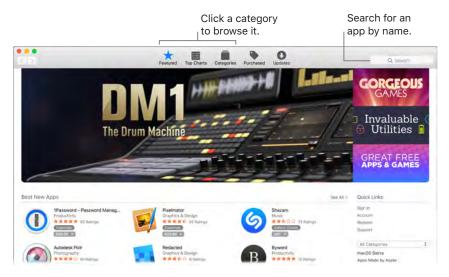
Use the Touch Bar. {need info; content coming 9/2 or 9/3}

Tip: Make your own ringtones, then sync them to your iPhone using iTunes. Choose File > New, select Ringtone, click Choose, then import a file to use. Customize the ringtone the way you want it, then choose Share > Ringtone to iTunes.



Search the App Store to find and download apps, and get the latest updates for your apps.

Find the perfect app. Know exactly what you're looking for? Type the name in the search field, then press Return. Or click Top Charts to see the most popular apps.



Ask Siri. Say something like: "Find apps by Apple."

Apple Confidential

All you need is an Apple ID. To download apps, just sign in with your Apple ID—choose Store > Sign In, or click Sign In on the right side of the window. If you don't have an Apple ID yet, choose Store > Create Account. If you can't remember your password, click the Forgot link in the login window to recover it.

Get the latest updates. If you see a badge on the App Store icon in the Dock, there are updates available for your apps or macOS. Click the icon to open App Store, then click Updates in the toolbar.



Use the Touch Bar. {need info; don't see anything}

Tip: You can spread the word about your favorite apps to your friends. While viewing an app, click the down arrow next to the price, then choose Tell a Friend.

Find answers 4

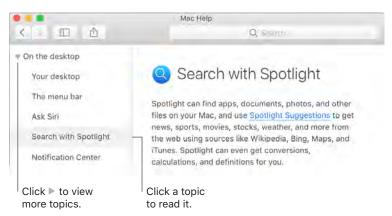
Mac Help

Mac Help has a lot more information about how to use your MacBook Pro.

Get help. Click the Finder icon in the Dock, then click the Help menu in the menu bar and choose Mac Help. Or type a question or term in the search field, then choose a topic in the results list.



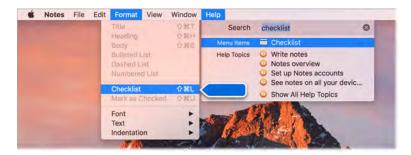
Explore topics. To find a topic in Mac Help, you can browse or search. To browse, click "Show topics" to see the list of topics, then click a topic to read it. Or type what you want to find in the search field to go right to your answer.



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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.

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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.

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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	
Ireland New Zealand	1-800-804-062 00800-7666-7666	www.apple.com/ca/fr/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

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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.

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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.

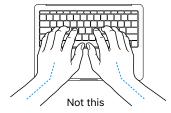
Cleaning your MacBook Pro. When cleaning the outside of your MacBook Pro and its components, first shut down your MacBook Pro, then unplug the USB-C Charge Cable and the 61W or 87W USB-C Power Adapter. Then dampen a clean, soft, lint-free cloth to wipe the MacBook Pro exterior. Avoid getting moisture 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 a 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.

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

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