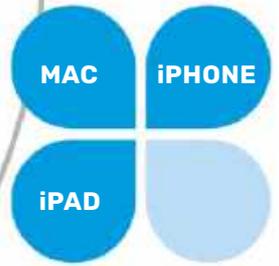


# Mac | Life



MAY 2023 NO.206

# 54



## GENIUS TIPS

Fix problems, be more productive, and do new things with your Mac, iPhone & iPad!



Get more **iPad storage** with an external drive

**Upgrade** your Mac's webcam with an **iPhone**

Master daily tasks with **Reminders**



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## ACCESSING YOUR ISSUES



**SINCE WE SWITCHED** to digital a while ago, I've been inundated with emails from print subscribers asking me how to access their new digital subscription. I have it on good faith that our digital marketing team have already sent out a mass email explaining what's going on, and what to do, but unfortunately I don't think it's managed to reach everyone. That's not entirely surprising, given how hit and miss digital correspondence can be — some emails will inevitably end up not sending for some reason, some might go in the spam, and some might even end up being missed or deleted by mistake.

Many of our readers also didn't provide an email when they signed up for their print subscription, meaning we had to post out a letter instead. Now, it's entirely feasible that this method of communication is actually somewhat more reliable than the digital counterpart, but naturally this isn't a 100% perfect process. So, if you're wondering what's happening, then we've not forgotten about you — we just haven't been able to get in touch. If you are reading this, maybe because you bought a single issue in the hope of finding out, then this is the information I was given: Step 1, you need to activate your digital subscription at <https://bit.ly/3GLkacp>. Scroll down to the Dedicated iOS magazine apps instructions to set up your subscription. If you already have a Pocketmags account, you will still need to do this as the back issues are exclusive to this app. Once this is set up you will have access to your subscription. Access to your back issues will be there as long as you are a subscriber. Step 2, access your digital bookazines at <https://bit.ly/41sYeKR>. Follow the detailed instructions at the top of the page. Hopefully that should do the trick! Do get in touch, if not.

Speaking of email correspondence, don't forget to sign up to my exclusive email newsletter by turning to page 79. There's a QR code that you can scan, which makes it super easy to sign up. Every month you'll get the latest news from me, and if there are any major changes at *MacLife*, you'll be the first to hear! ■

*Nick*

**NICK ODANTZIS**, Editor  
Twitter: @maclife

## THE TEAM



**Matt Smith**  
Art Editor

Matt, previously of *MacLife* fame, couldn't resist coming back on board for another issue to cover, but he assures me it's just a one-off...



**Rachel Terzian**  
Production Editor

The Reminders app (see p61) is so handy, especially for someone like Rachel, who loves to create lists for pretty much everything.



**Rob Mead-Green**  
Contributor

Rob's CarPlay superguide (p52) is highly recommended — after using it for a few months he's not sure how we all used to live without it!

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# START

THE LATEST NEWS FROM THE WORLD OF A

## iPhone 15 preview

What's coming in the next iPhone model?

BY ALEX SUMMERSBY

**THE IPHONE 15** line due this year promises a big shakeup in several respects. Here is what we expect.

First up, instead of Lightning, the iPhone 15 will have a USB-C port, as ordered by the EU for all devices sold in Europe as from the end of 2024.

All models' screens are likely to lose the notch and feature Dynamic Island, the variable interface element introduced in iPhone 14 Pro to camouflage the front-facing camera and other under-screen components. Aside from this, the 6.1-inch iPhone 15 and 6.7-inch iPhone 15 Max are said to have screen sizes and body designs much like the current model's, with an aluminum frame and toughened glass front and back.

By contrast, significant design changes are expected in the 6.1-inch iPhone 15 Pro and 6.7-inch iPhone 15 Pro Max. These include a titanium frame, both lighter and stronger than aluminum, with more rounded corners and thinner screen bezels.

Some sources said the Pro models will be getting brighter, more power-efficient OLED display tech, with a maximum brightness up to 2,500 nits — possibly the brightest screen ever on a phone — but recent reports say this won't happen until the iPhone 16.

It is believed the Pro models will have ProMotion adaptive refresh rate technology and always-on displays. The regular iPhone 15 models, though, are expected to have the same 60Hz



The iPhone 15 will have the same A16 Bionic chip as the iPhone 14 Pro has now.

displays as current models, now somewhat behind the industry curve.

Early rumors said the Pro models would also have a solid-state mute switch and volume buttons, each with a dedicated haptic engine underneath for feedback. However, the latest reports say Apple is facing technical issues with the technology and all models will have the familiar buttons. Even so, one source claims the iPhone 15 Pro models will have a customizable Action button, like that on the Apple Watch Ultra, instead of a mute switch.

### LATEST PROCESSOR TECHNOLOGY

Inside, the iPhone 15 Pro models are expected to introduce a new A17 chip, the first processor fabricated using chipmaker TSMC's next-gen 3nm process. This is said to increase processing performance by 10–15% while reducing power consumption by up to 35%, promising even more responsive apps and better battery life. The standard iPhone 15 models are believed to have the 4nm A16 Bionic chip used in the iPhone 14 Pro.

All iPhone 15 models will reportedly use a Qualcomm modem chip, probably the X70, instead of Apple's

own 5G modem chip, which is still in development and won't be ready until 2024 at the earliest. However, Pro models could gain Wi-Fi 6E, which offers faster connectivity, lower latency, and greater bandwidth than the current models' Wi-Fi 6.

According to analyst Ming-Chi Kuo, the Pro models will support "at least" USB 3.2 or Thunderbolt 3, which would mean much faster data transfer (up to 20Gb/s or 40Gb/s respectively, as compared with 480Mb/s for USB 2.0). However, there are reports that faster data speeds — and fast charging — will be possible only with accessories certified to Apple's Made for iPhone (MFi) standard.

Finally, the camera in iPhone 15 Pro is rumored to be a major upgrade, with periscope lens technology that offers 6x or even 10x optical zoom, compared to the 3x in current Pro models, and possibly all-new sensor tech capable of capturing more light, for better exposure in varied lighting conditions.

Apple usually releases new iPhone models in September. Pricing is expected to be unchanged — 6.1-inch models starting at \$799 and 6.7-inch from \$899.

## > Apple goes even greener

On track to decarbonize production by 2030



**APPLE HAS ANNOUNCED** that its manufacturing partners now support 13.7 gigawatts of renewable electricity around the world, which is an increase of nearly 30% in one year. In total, more than 250 suppliers operating across 28 countries are committed to using renewable energy for all Apple production by 2030. This represents more than 85% of the company's direct manufacturing spend and more than 20 gigawatts in commitments.

Apple itself is already carbon neutral for its global corporate emissions, and

has called on its suppliers to decarbonize all Apple-related operations, including sourcing 100% renewable electricity. More than 40 manufacturing partners joined Apple's Supplier Clean Energy Program in the last year, and Apple has committed \$4.7bn in Green Bonds, which are helping finance the expansion of clean energy solutions and emissions reductions around the world through investments in large-scale solar, low-carbon design, energy efficiency, and carbon removal.

## > Apple expands in India

**APPLE IS GRADUALLY** reducing its reliance on China as its manufacturing base and last year made \$7bn worth of iPhones in India. This was almost 7% of global iPhone production, growing from just 1% in 2021. According to a report by JP Morgan, Apple is planning to expand its manufacturing capacity in India to produce 25% of all iPhones by 2025.

At the same time, it is also opening its first two Apple Stores in India, Apple BKC in Mumbai and Apple Saket in Delhi. Although Apple products have

been available in India for 20 years, the Indian government only recently eased restrictions on foreign-owned single-brand retail stores.

IDC estimates that Apple has a 60% market share in the Indian "premium smartphone" market (phones costing 40,000 rupees – about \$490 – or more), but this is a tiny slice of the country's notoriously price-sensitive market – around 5%. The average salary in India is less than 30,000 rupees or about \$367 a month.

## News in brief

A bite of the Apple

### > IMPORTANT UPDATES

Apple has urged all users to install the latest security updates – iOS 16.4.1, iPadOS 16.4.1, and macOS 13.3.1 – to fix a couple of serious security issues. It says of each: "Apple is aware of a report that this issue may have been actively exploited," which is as close as it gets to confirming that unpatched systems are at immediate risk. There are also security updates for older phones that still run older iOS versions, a move also indicative of serious vulnerabilities.

The security updates have arrived not long after iOS/iPadOS 16.4 and macOS 13.3 Ventura, which delivered a number of enhancements:

- > 21 new emojis are introduced (31 if you count skin tone variations), the first new emojis in more than a year.
- > There is now an option to receive push notifications from Safari (from sites you have saved to your Home screen).
- > Voice Isolation mode, an option in FaceTime for some time, is now available for phone calls too.
- > Freeform gains a Remove Background option, which automatically isolates a subject from the image background.
- > Duplicate photos and videos can now be detected in Shared Photo Libraries as well as local ones.
- > Among other things, there are also updates to the HomeKit architecture and podcasts, plus the return of the page-turn animation in Apple Books.





# iPad Pro vs MacBook Air

Apple's hardware lineup is becoming increasingly confusing. **CHARLOTTE HENRY** tries to unpick it all

**T**here is little more thrilling for an Apple fan than getting to pick out a new Mac. You walk into the shop and tell the staff member which new essential work item you're going to buy; almost as thrilling is building your perfect machine in the online store.

In recent years, that process has become a lot more confusing though. Products across the company's range seem to have become more and more similar, and it's not just across the Mac offerings. Some iPads are now so powerful it is hard to distinguish them from what we would traditionally think of as a laptop.

So, for example, assuming you do not need the most powerful Mac and are mostly looking for portability, do you want a MacBook Air or an iPad Pro? Making a decision based on price and features is not straightforward.

The lowest specification MacBook Air available at the time of writing contains the M1 chip, an 8-core CPU and 7-core GPU. The iPad Pro, meanwhile, also has an 8-core CPU but boasts a 10-core GPU and M2 chip. The MacBook Air does have a slightly larger display — 13.3 inches compared to 11 or 12.9 inches offered by the iPad Pro — but that is one of the only key criteria on which the laptop "wins".

The iPad Pro starts at \$799 for the 11-inch or \$1,099 for the 12.9-inch display. However, including a keyboard adds either \$179 (Folio Keyboard) or \$299 (Magic Keyboard) to the bill. The MacBook Air costs from \$999. There is a newer M2 version of the laptop available, but this doesn't exactly help clear up the confusion. It can be purchased with a 10-core GPU and 13.6-inch display for \$1,499. It all just means that both the Air laptop and the iPad Pro are running on the

same Apple silicon, and depending on your needs may lead to similar costs.

Far from worrying about this development, Apple has been keen to embrace it. When it released an iPad Air with the M1 chip in March 2022, its ad for the device ended with the tagline "your next computer is not a computer", with the promo clip showing off the flexibility and versatility of the tablet.

## CONFUSION REIGNS

Dave Hamilton has spent years giving Apple users advice on the popular *Mac Geek Gab* podcast. He told us: "Today's iPad vs MacBook decision really comes down to what, specifically, you plan to do with your device. The MacBook can do 'everything', but it's not (quite) as convenient for reading or quick, on-the-go interactions. If the apps you need are available on iPad and



workflows are suited to your liking, then an iPad really can be the right device. But if you have any questions, a MacBook is likely the safe choice.”

Similar confusion can be found within Apple’s desktop Macs too. The latest Mac mini can be bought with an M2 or M2 Pro chip inside. The older iMac 24-inch still has the M1 chip. The Mac mini has a 10-core GPU while the iMac has a 7- or 8-core one. The Mac mini costs from \$599, but looking at price points is not particularly useful in this instance as you may

need to buy a display and other accessories for it. That said, it may well still come in at less than the cheapest iMac, which costs \$1,299. Unless you feel strongly about the colors the iMac comes in, the mini might seem the more tempting option. However, some people like the unified nature of the iMac and don’t want the extra fuss of researching and buying additional peripherals.

At least within individual product lines things are relatively clear. For instance, Apple sells 13-, 14-, or 16-

inch MacBook Pros, with the M2 Pro/Max chips available in the larger two models. This is also true across the current range of iPads. The 10th generation, entry-level iPad has an A14 Bionic chip, while the latest iPad Air has an M1 chip, and the iPad Pros are powered by M2 chips. The difference in hardware is naturally reflected in the price. Your budget is a fairly fixed factor; it’s deciding which product line you want to purchase from in the first place that’s becoming increasingly complicated. ▣

# Your next computer is not a computer

At the launch of the M1 iPad Air, Apple's "Your next computer is not a computer" slogan emphasized the power of the tablet.

## LESS IS MORE, MORE IS...

Obviously, customers should delve into the spec comparisons more deeply to find what's best for their particular needs. However, not everyone has the time or tech know-how to do this. While choice is a good thing — we all have different needs and budgets — clarity is also important when buying big-ticket items like a Mac.

It's also worth bearing in mind that the differences outlined are in no small part caused by products having

different upgrade cycles. There can be little doubt we will get a faster Apple silicon iMac in the future (more likely M3 than M2). The MacBook Air will likely get an upgrade too...

The fascinating thing about this shift is that it is the total opposite of what Steve Jobs set out to do when he returned to Apple in 1997. In his definitive biography of Jobs, author Walter Isaacson explains how the Apple co-founder was deeply frustrated by the number of products the company made and how this was

confusing consumers. In typically ruthless fashion, he quickly cut many of them.

According to Isaacson, "After a few weeks Jobs finally had enough... 'Stop!' he shouted at one big product strategy session. 'This is crazy.' He grabbed a magic marker, padded to a whiteboard, and drew a horizontal and vertical line to make a four-squared chart. 'Here's what we need,' he continued. Atop the two columns he wrote Consumer and Pro; he labeled the two rows Desktop and Portable. Their job, he said, was to make four great products, one for each quadrant."

One can only imagine what Jobs would make of the wide-ranging set of computers and tablets on offer from the company today. It is fair to say that a modern Apple cannot be quite as simplistic as it was just over a quarter of a century ago. It now thrives by offering top-end products in a host of categories. It's not just about Macs, iPads, and iPhones either. Wearables like AirPods or the Apple Watch are all crucial products too. However, that does not necessarily mean that the crossover within the Mac lineup and between Macs and top-end iPads need be as tricky to navigate as it is.



A Mac mini is an affordable way to up spec, but you've got to add peripherals to your overall spend.

## DECIDING WHICH PRODUCT LINE TO PURCHASE FROM IS BECOMING INCREASINGLY COMPLICATED

### SOFTWARE SIMILARITIES

It's not just on the hardware side where clashes occur either. While it is absolutely true that macOS remains much more powerful than its equivalents for iPhone and iPad, Apple's operating systems are becoming increasingly similar. This became particularly apparent with the release of macOS Ventura in October last year. It closely resembles iPadOS and iOS, themselves now almost indistinguishable.

This is in large part entirely justifiable. The resemblances in design between the Mac operating system and the mobile ones make it easier for users, particularly less experienced ones, to know how to complete the same task across different devices. For example, System Settings in macOS Ventura looks a lot more like Settings in iOS



Thanks to Continuity, you can start something on one Apple device and move seamlessly to another.

and, amongst many other things, it's now much simpler to change a Mac's wallpaper. The option is now clearly visible, not hidden deep in the settings as it was on previous versions of macOS. Similarly, Handoff, which lets you easily open on one device a browser tab or app already in use on another, provides ever smoother workflows. This ease of transition across devices is without a doubt hugely beneficial. It does not matter which device you start a variety of tasks on as you can easily continue

them on another. Features like this increase the sense of a complete ecosystem in which the Mac, iPad and iPhone all integrate seamlessly. This helps Apple as it makes it even more enticing to only use its products and commit to the brand.

However, any simplifications caused by increasing similarity across the operating systems could potentially mean features required by Mac power users are dumbed down or harder to access. Crucially, if the functionality seems almost the same, it makes it even less clear what device is actually right for any particular user to invest in.

### WHAT DO I NEED?

Ultimately, there is no right or wrong answer to any of this. All purchasing decisions come down to what you need and when you need it. It may simply not be possible to buy the perfect device at the perfect time. You may have to settle for a slightly older chip or compromise on other specs or features. However, there is little doubt that in recent years Apple's product lineup has become increasingly full and confusing, making buying a device just that bit more difficult for anyone who's about to spend a whole lot of money. ■



With a Magic Keyboard, the iPad Pro is becoming increasingly similar in use to a MacBook.

## > THE SHIFT

**MATT BOLTON** is wondering whether ChatGPT is a danger to Apple, Siri's savior, or just another API to support



**O**VER THE LAST few weeks, the single most dominant tech story has been ChatGPT, and its eerily good ability to create written documents from an "AI" database. Well, I say "single", but what's been written about it has gone through so many transformations — from "Wow, this thing is amazing!" to "Oh, this thing is terrifying" to "This will make my life much easier" to "This will put me out of a job" to "I can get any information digestible" to "Ah, it just makes up facts sometimes" and "Oh no it also might throw in slurs", and so on.

A lot of talk about it has been focused on where people

will access it in practice. Microsoft sees AI as a way to do the impossible and leapfrog Google in search, adding it into Bing in a trial that's live now. Ask Bing a question and you'll get an answer that ideally makes sense and is accurate, but the latter of those in particular is not guaranteed.

Microsoft is already pushing AI-powered tech as a way to compose copy too — an AI assistant can be used in the Edge browser to write posts on LinkedIn, which is a terrifying thought. I really don't know that the platform needs an easier way to post complete drivel on it.

One company silent on ChatGPT so far is Apple. I think this is no bad thing — the technology is not ready for prime time, and how "acceptable" we'll find it is far from settled. But it's certainly in Apple's wheelhouse — consider how the company uses other types of machine learning in photos and battery management and predicting what apps you'll use, all to make life easier — so I wonder what it's thinking about it.

Maybe it gives Apple the chance to create its own search engine, as it has supposedly wanted for a while. But I can't see the company liking the idea of the possibility that an Apple-branded product might tell you that it's safe to boil a baby (as Bing's version did for a moment, reportedly).

Siri has been stagnating compared to other voice assistants,



Few ideas are odder than that of choosing a topic, opting for a chipper tone, and then posting it as your own.

and ChatGPT could be an incredible opportunity there. Use Siri's voice recognition to identify knowledge questions, feed them to ChatGPT, and have Siri read out the answers. It has the same risks as those mentioned, but maybe Apple would be more willing to take them since Siri is an existing product that needs a boost.

Or maybe Apple will take no stance at all. Maybe it'll promote that if developers want to use ChatGPT in their apps, the A-series and M-series chips do it faster than anything else on the planet, but it'll keep clear of the tech itself. Maybe it'll include Bing's AI search in Spotlight, again keeping it clear that it's another company's results, and with the option to turn it off — an arm's length away from any worrying results.

We're on the precipice of something, make no mistake. But what happens next is as much about politics as it is technology, and we should not underestimate the power of the former to steer the latter.

## THERE'S BEEN A LOT OF TALK, BUT CHATGPT TECH IS NOT YET READY FOR PRIME TIME...



The conflation of information here is impressive; flights from an airport, time to get there, and places to visit.

>>> Matt is Managing Editor at [www.TechRadar.com](http://www.TechRadar.com), and previously worked on *T3*, *MacLife* and *MacFormat*. He's been charting Apple's ups and downs since his student days, but still hopes to hear "one more thing".

## LETTER OF THE MONTH

On the scale of frustrations in life, this is pretty low on the list, but it's annoying enough that I've tried to figure out how to deal with it — and can't. So I'm contacting the ultimate authority: YOU ALL!

I use Apple Mail on my MacBook, iPhone, and iPad, all synced via iCloud. I'm accessing emails from several Gmail accounts; an old professional account; and my mac.com and iCloud.com accounts, which are what I use for most of my personal correspondence. I'm a pretty fast typist, so I prefer to answer emails from my MacBook, but I also sort, read and respond to some emails on my cell phone.

On the iPhone, I'd like to be able to deal with every message in the same way: for example, I want to be able to swipe right to archive a message and swipe left to delete it. But there doesn't seem to be any consistency to the way these gestures work in Mail on the iPhone, and I can't find any way to achieve any consistency so that they all work the same way for every message.

For some messages, I can swipe right and delete them. For others, I have to go through a longer process, which involves

selecting folders and dropping the message into the trash. I believe that this has some relationship to whether the messages are from iCloud or Gmail and may relate to how the various folders are set up for these accounts. But I can't find any documentation, anywhere, that helps me figure out how to make the gestures the same for every message.

Does this make sense? And how do I fix it? Thank you.

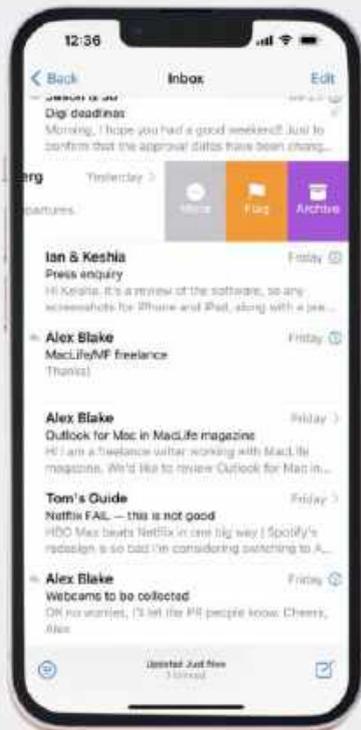
**MICHAEL STONER**

Michael, I too have noticed this same behavior when swiping left on emails from different account providers, where some will have the option to delete the message, while others will have the option to archive it instead.

From what I understand, you are absolutely correct in saying that

the default action for each mail account can be different.

Thankfully for us, this default action isn't set in stone, and it can be changed in the Settings menu. In here, tap Mail > Accounts. Tap on the account you want to edit, tap Account once more, and tap Advanced. Under where it says "MOVE DISCARDED MESSAGES INTO:" choose either Deleted Mailbox or Archive Mailbox.



### Legibility issues

I read every page in your magazine. I love it and find things of interest in most every issue. However, I find the faint printing of your answers to the questions makes it rather hard for me to read, especially if the ambient light is not very bright.

Since you have a full page line drawn between the question and answer, I can find no way that the answer cannot be done in black and/or bold print. Give it a long thought please.

**ROBERT WHETSTONE, WISCONSIN**

I really appreciate the feedback Robert, and I've been aware of the issue for some time now. The main problem is down to the quality of the printed paper, which over the years has been reduced. We've tried our best to mitigate this by choosing shades of gray that aren't affected so much.

Yes, we could just make the question and answer in the Ask section all one shade, as you suggest, but then the section would look very heavy (and in all honesty, also not very pleasant from a design perspective).

Fortunately, that won't be a problem for you going forward as we've now made the magazine exclusively digital. Unlike the print edition, what we see on our Macs when we're designing it is exactly what you see when you read it on an iPhone or iPad (albeit in a different scale). This makes the magazine look as we intended, and consequently it's much easier to read.

### AirTag share

Is there any way to share an AirTag with more than one person? Any chance Apple might add that feature?

**KAT ANTIGONE, TROWBRIDGE**

That's a great question Kat.

Unfortunately, an AirTag can only be assigned to a single Apple ID, and so there is no way to share an AirTag with another person/Apple ID. In future, Apple may allow sharing of AirTags within Family Sharing, but it's doubtful due to ongoing privacy concerns.

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Mac|Life



# 54

## INCREDIBLE THINGS TO DO WITH YOUR MAC, iPhone, AND iPad

Your Apple devices are extremely versatile, offering a multitude of ways to be creative, stay safe, learn skills, discover new hobbies, and much more...

WRITTEN BY IAN OSBORNE

**T**HE FLEXIBILITY OF what you can do with your Apple gear is amazing. Apple tech is so versatile; there's just so much you can achieve with a Mac, iPhone, iPad or Apple Watch. In this in-depth guide, we round up some of the best tips and tricks that enable you to be more creative, productive, solve problems, and features you might not have anticipated. Want to use your iPad as a drawing tablet? You can. Would you like to ask Siri to remember where you parked your car? We show you how. Ever wanted to write a novel or screenplay on your Mac? Discover the

best way to get started. You can get an ECG, blood oxygen test, and loud environment report directly from your Apple Watch too.

For many of these tips, you already have everything you need bundled with your device's operating system. For others, you might have to buy an extra app, though we've mostly concentrated on low-cost software.

So what are you waiting for? Take a look at our collection of interesting projects for all your Apple gear, and start to use your desktop or notebook Mac, iPhone, iPad, or Watch in a whole new way.

# On the Mac

Amazing things you can do on your desktop or notebook Mac



## Learn a language

**1** Launched in 2012, Duolingo has grown into the internet's most popular means of learning a language. In fact, in the US, more people are learning languages on Duolingo than in the entire public school system. Duolingo offers more than 100 total language courses for 42 distinct languages. These include endangered languages such as Hawaiian, Navajo, and Scottish Gaelic, and fictional tongues such as *Game Of Thrones'* High



Valyrian and *Star Trek's* Klingon. It's accessible through a browser on the Mac ([www.duolingo.com](http://www.duolingo.com)), and there are apps for the iPad and iPhone for learning on the move. Language students should also have <https://translate.google.com> bookmarked, a great translation site.



## Enjoy your sounds

**3** The Music app can rip your CDs so you can play them on your Mac, or stream sounds from the Apple Music service. But did you know you can minimize its interface so it doesn't get in the way when you're working? Click on the Window option in the top bar and select Mini Player, or press Opt+Cmd+M. You open a small window showing what's currently playing and giving you basic controls when you hover over it. You can also enjoy a light show that reacts to the sounds being played. Again, click on the Window menu and select Visualizer, or press Cmd+T. It looks great in full-screen – just the thing for a party. Visualizer Settings are also available under the Window menu.



## Install a VPN

**2** Online security is increasingly important these days. A VPN – Virtual Private Network – can do much to keep your data safe and protect your privacy. By disguising your location, it can also get around geo-blocking restrictions. If a website is UK-only, for example, just point your VPN at a UK-based server.

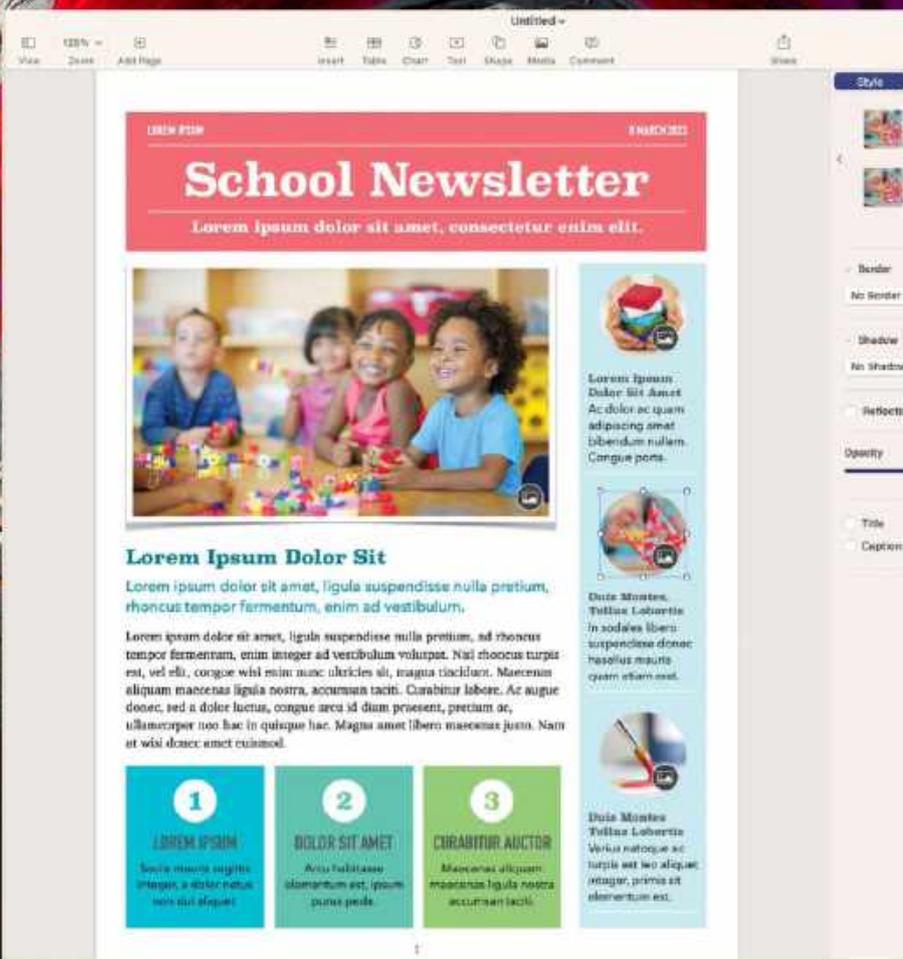
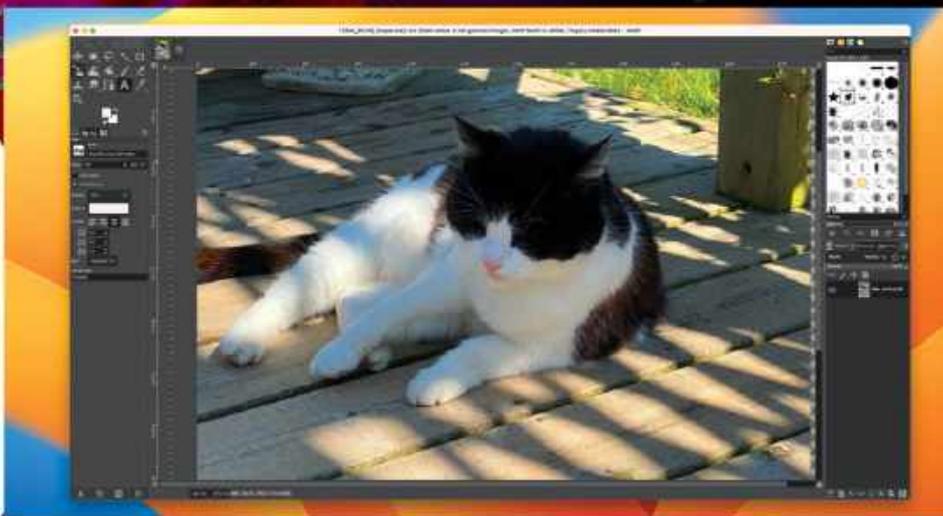


## Keep awake

**4** Amphetamine is an excellent free app, available on the Mac App Store, that lets you stop your computer from going to sleep. The app is accessed from the menu bar, and it can be activated and closed with a single click. You can set your Mac to stay awake for a set time, while an app is running, while a file is downloading, and more.

## Art for free

**5** If you're looking for a powerful graphics editor but don't have the money to spend on Photoshop, get GIMP (GNU Image Manipulation Program). It's open-source, free, and available for most desktop/notebook platforms. It has a steep learning curve, but there's plenty of online help. Download from [www.gimp.org](http://www.gimp.org).



## Sync Notes

**7** Are you using the Notes app to its fullest potential? As well as making notes on your Mac and storing them in folders, you can have them sync with your iPad, iPhone, and the iCloud website by placing them in the iCloud section. You can also make a Quick Note (also synced) by using the Hot Corner in the bottom right.



## Run Windows

**8** While Boot Camp isn't available on Macs that run Apple silicon processors, it's still possible to run Windows — as well as Linux, and other versions of macOS — on your Mac. It's called virtualization, and it lets you run alternative operating systems alongside macOS without rebooting. Two leading Mac virtualization solutions are Parallels Desktop ([www.parallels.com](http://www.parallels.com)) and VMware Fusion Pro ([www.vmware.com](http://www.vmware.com)). While they're both very competent, Parallels is more user-friendly, guiding you through installs with a very easy-to-use wizard. It's far more feature-rich when used on Apple silicon Macs too. Parallels Desktop Standard Edition costs \$99.99; Fusion Pro costs \$199.

## Free Office apps

**6** Once a paid-for productivity suite, Apple's iWork apps are available for free from the Mac App Store. These apps comprise Pages, a feature-rich word processor; Numbers, a powerful spreadsheet application; and Keynote, the presentation app used by Apple's speakers during their keynotes. Some might be reluctant to use iWork apps as they might need to share docs with other

platforms, but much of the time this isn't a problem. On Mac, click the File menu in the top bar, select Export To and choose a common format such as a Microsoft Office format, plain text or PDF. On iPhone or iPad, tap the More button ("...") then Export. You can edit your iWork documents online at [www.icloud.com](http://www.icloud.com), and there are dedicated apps on Apple's mobile devices.



### Watch TV and movies

9 There's more to enjoying TV shows and movies than the excellent Apple TV app. Most leading streaming subscription services such as Netflix, Disney Plus and Paramount Plus have their own websites. If you access them through Safari or another web browser and log in with your account details, you can enjoy their content on your Mac. Download the free Plex media

center ([www.plex.tv](http://www.plex.tv)) and you can stream all sorts of services directly to your computer. If you have a NAS drive, video files stored on it can be streamed on Plex, or maybe the software bundled with your chosen NAS drive. And if you have video files that won't play on your usual applications, try VLC (free, [www.videolan.org](http://www.videolan.org)). It's ugly, but it can handle pretty much anything.

### Follow stocks

12 Previously only available on mobile devices, the Stocks app is now bundled with macOS too. The app collates leading financial stories and lets you follow the prices of stocks. You can look up share prices by a company name or its stock exchange code, and then save them so they appear at the top of the list.



### Browse Reddit

10 Social news aggregation, content rating and discussion website Reddit ([www.reddit.com](http://www.reddit.com)) is a wealth of info, but it can be messy to use. The Apollo app (free, offers IAPs, <https://apolloapp.io>) makes it a good deal cleaner. Available on the Mac, iPhone and iPad, it was coded by a former Apple employee, and is packed with features.



### Store passwords

11 Password managers keep web passwords, login details, software serials, and more in the same place. Several are available for the Mac, but Secrets (free, offers IAPs, [www.outercorner.com](http://www.outercorner.com)) offers iCloud syncing with its iPhone/iPad apps, a password generator for creating secure passwords, auto-fill, unlock with Touch ID/Apple Watch, and more.

### Make music

13 Producing music on Mac doesn't have to cost a fortune. Sure, you can use pro-level products like Logic Pro (\$199.99, Mac App Store) or Ableton Live (from \$99, [www.ableton.com](http://www.ableton.com)), but GarageBand is a free and fully equipped music studio that's designed to be accessible for beginners, but also powerful enough to create quality

results. It comes with a sound library featuring a range of instruments and voice manipulation, so you can create tracks with or without a physical instrument. GarageBand also offers a range of built-in lessons for piano and guitar. You can share tunes on social media, export them to Music, save them as ringtones, and more.

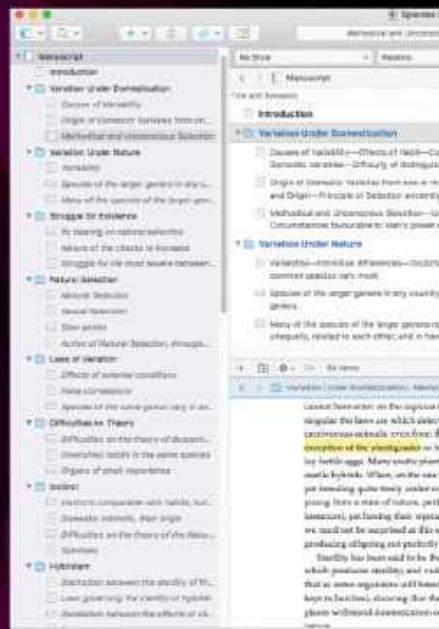


## Edit a movie

**14** Like GarageBand, iMovie is free, available for Macs and mobile devices, and combines ease of use with some powerful features. If you're interested in movie making, start here. iMovie lets you create a cinema-quality video (subject to your talents, of course) including titles, transitions, and music. You can design your work shot by shot using iMovie's storyboards and pre-

made video templates, and create exciting effects too.

When you're ready to move on to a full professional video editing package, try Apple's Final Cut Pro (\$299.99, Mac App Store) or Adobe's Premiere Pro (\$20.99/month). Although, there's plenty to do in iMovie before you've exhausted its potential. Movie making has never been easier, or more fun.

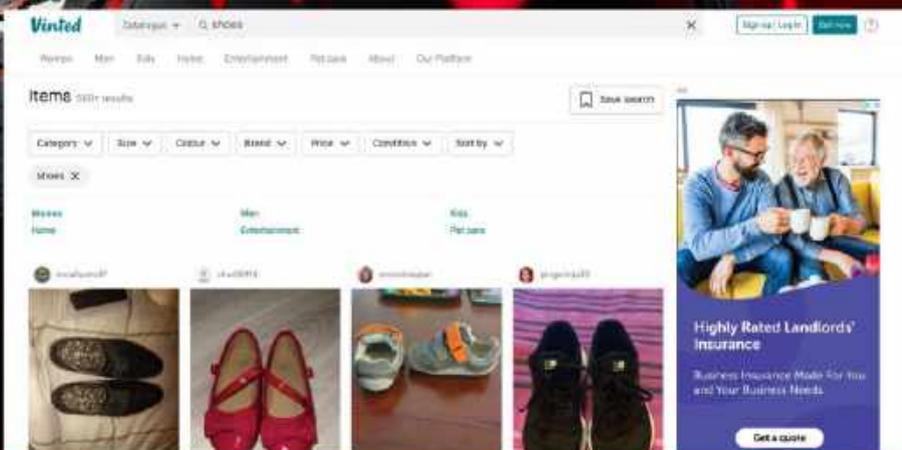


## Write a novel

**16** You can use Apple Pages, Microsoft Word, or the free Bean word processor ([www.bean-osx.com](http://www.bean-osx.com)) for long-form writing. But if you're serious about your novel, screenplay or movie script, go for Scrivener (Mac \$59.99, [www.literatureandlatte.com](http://www.literatureandlatte.com)). As well as your writing, it also organizes your notes, makes it easy to move chapters around, and lets you store your research, all in one app.

If you have an idea but are unsure where it fits in your project, just write it, and slot it in later. You can write in self-contained chapters and sub-chapters, with each getting its own file card where you can summarize its contents for easy reference. By allowing you to write, research, and arrange documents into smaller sections, Scrivener deals with organizing your project, leaving you to concentrate on the writing. When you're done or ready to pass it on for checking, you can export it in a variety of formats, including ebook. It's available for the iPhone and iPad as well as the Mac.

Another excellent long-form writing app to try is Ulysses (\$39.99/year, [www.ulysses.app](http://www.ulysses.app)). It's not as powerful as Scrivener, but some might prefer its more minimalistic approach.



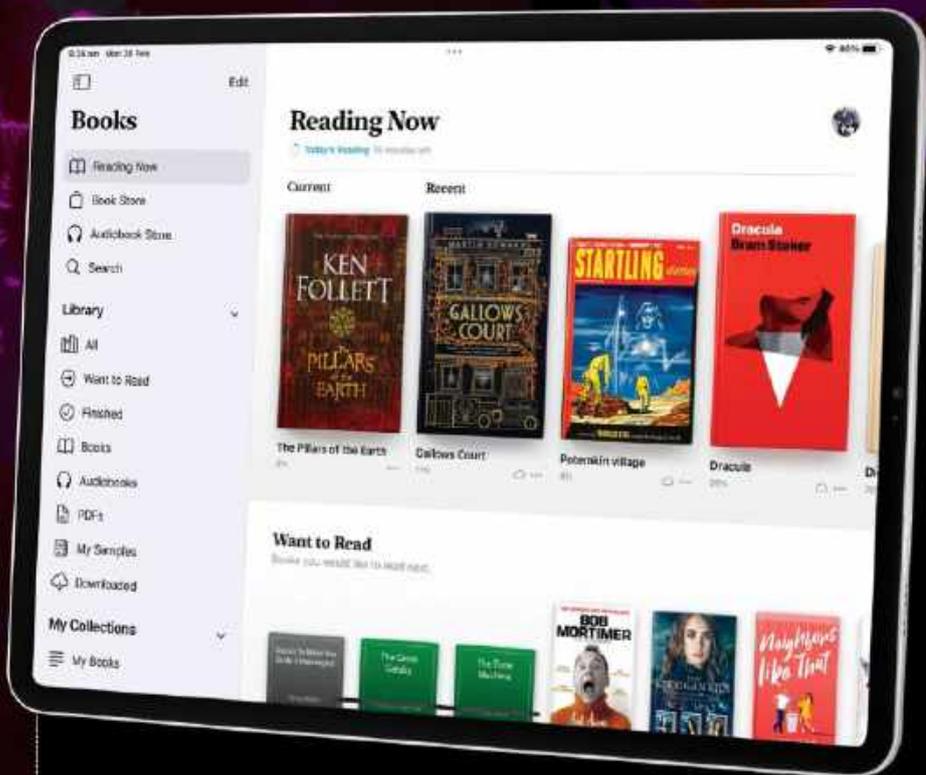
## Buy and sell

**15** If you want to buy new and second-hand goods at a bargain price and sell your own unwanted items for some spare cash, a number of options are available. The most popular, of course, is eBay ([www.ebay.com](http://www.ebay.com)). There are two types of eBay sales; Buy It Now, where you purchase or sell an item for a set price, or Auction, whereby buyers bid for items.

Vinted ([www.vinted.com](http://www.vinted.com)) works differently to eBay, in that selling an item doesn't attract a fee, though paid-for services are available. Vinted sales are always fixed price – no auctions. Finally, if you have a Facebook account, try Facebook Marketplace. As it's locally based, you can arrange for items to be collected instead of posted, and there are fee-free options.

# On the iPad

Tackle your creative projects on the go with these perfectly portable apps and software



## iPad as a drawing tablet

**18** A neat trick for Apple Pencil owners is to use their iPad as a drawing tablet for their Mac. It's easy to do. First of all, connect your iPad to your Mac using Sidecar. In macOS Ventura, do this by going to System Settings > Displays, click the "+" then select your iPad from the list that appears. In Monterey, go to System Preferences > Displays, click Display Settings, then select your iPad in the sidebar. On earlier versions of macOS, Sidecar has its own System Preferences pane. With the iPad set up as an extra Mac screen, click on it in Displays in System Preferences/Settings. Under Use As, select "Mirror for Built-in Display". You can now open the drawing app of your choice on your Mac, and it also appears on your iPad (full-screen mode works best). Draw on the iPad's screen with Apple Pencil, and the edits also appear on your Mac.

Alternatively, on your iPad, you can open the Control Center and tap the Screen Mirroring icon. From the list that appears, choose your computer. Your Mac now shows your iPad's screen. Choose any art app on the iPad, and your drawing is also shown on your Mac.

## Read eBooks

**17** The iPad is a very capable ebook reader. It comes with its own ebook service in the Books app, where you can buy and enjoy digital literature (including some for free), and you can also read PDFs and books saved in non-proprietary formats that you've installed outside the Apple ebook store. It makes for a comfortable read: you can change the font and text size to suit your

eyes, and also tweak preferred display options, like opting for white text on a black background.

If you've already bought ebooks from Amazon, you can read them on iPad using the Kindle app (free, App Store). This offers similar features to Books and, when signed in with your Amazon account, you can access all your Kindle books on it.



## 3D design

**20** There are several apps for 3D drawing and design. Live Home 3D is powerful and affordable. AutoCAD mobile is ideal for AutoCAD desktop users who want to work on the go. Look out too for Shapr 3D CAD modeling and SketchUp; all are free on the App Store but with IAPs. Alternatively, Tinkercad is completely free.



## Handwritten notes

**19** If you own an Apple Pencil, try a writing- and sketch-driven app such as Noteshelf (\$9.99), INKredible (free, IAPs) or Inkflow Plus Visual Notebook (\$5.99); all on the App Store. And don't forget you can write using the Apple Pencil almost anywhere on iPad that you can type, including text fields, Notes, and Freeform.

## A collaborative whiteboard

**21** With Apple's new Freeform app, you can visually lay out content on a flexible canvas. Scribble notes, draw diagrams, paste URLs, add photos and more, and if you run out of space, simply scroll the board to a clear part. It's collaborative too – share it with colleagues, and you can all work on the same space, with edits synced.



## Video calls

**23** Apple users have long enjoyed FaceTime video calls, made over the internet for free and available on Macs, iPads, and iOS devices. Since iOS 15 and macOS Monterey, you can take – but not initiate – FaceTime calls on an Android or Windows device too. But there's more to video calls and conferencing than just FaceTime.

Skype is available for free from the App Store, and it lets you make HD video calls with up to 49 people at once. Zoom (free, offers IAPs) is great for conference calls, and is the platform of choice for business users. Facebook Messenger, another free app, has a video calls service. Just tap the video camera in the top-right corner of the chat window. It's great for chatting to Facebook friends.



## Compose a score

**22** If Beethoven, Handel and Mozart were alive today, they'd probably compose their symphonies using an iPad. With StaffPad, you can write music with the Apple Pencil, and the app transforms it into typeset notation

that can be edited, played back, printed and shared. It includes over 55 instruments, and you can buy more if you wish. It isn't cheap, though. The app costs \$89.99, with some of the instrument packs costing \$99.99 each.

# On the iPhone

With an iPhone in your pocket, you're never short of things to do



## Identify a song

**24** If you hear a song on the TV or radio which you can't identify, use the free Shazam app. Open it from the iPhone's Home screen or Control Center, or simply say, "Hey Siri, what's this song?" The app identifies the tune, and gives you other songs by the band, lyrics and more. The app has an Apple Watch component too.



## Hang pictures

**25** If you have trouble hanging your pictures straight, reach for your iPhone and open the Measure app. At the foot of the screen, tap the Level icon. Now place the side of your iPhone on the top of the picture frame, and adjust the picture until it's level. You can also use this feature to make sure twin hooks are parallel.

## Buy with Apple Pay

**26** The days when you had to get your wallet out and push your credit or debit card into a machine are gone. Now you can use the iPhone's Wallet app to store information on your cards and, at the checkout, you can wave your iPhone at the reader instead. Better still, if you have an Apple Watch, you can hold it next to the reader and pay without reaching into your pocket.

To set up a card or cards with Apple Pay, open the Wallet app, tap the "+" icon and follow the on-screen instructions to scan the card. Add the security code from the back of the card if asked to do so, and your card is ready for Apple Pay. To pay with your Apple Watch, double-tap the side button and use the Digital Crown to choose a card. It's quick, easy and secure.



## Shine a light!

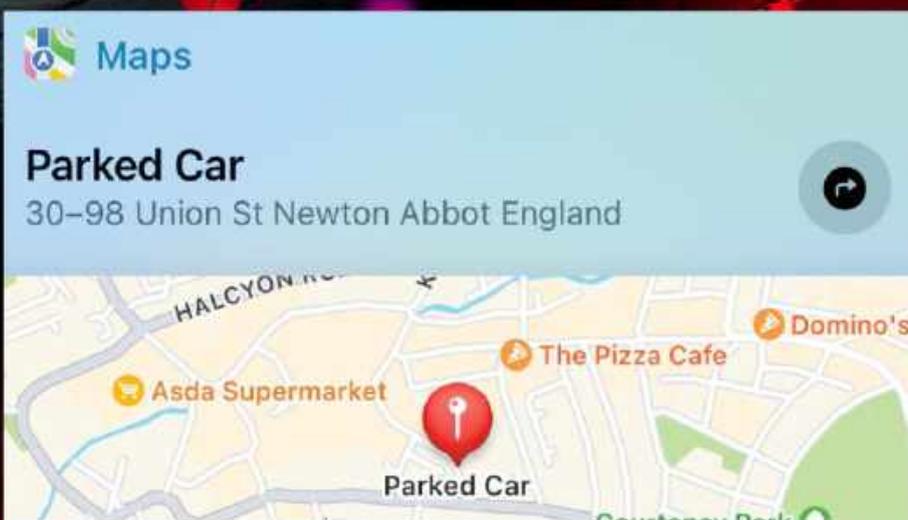
**27** You can use your iPhone as a torch, using the camera flash to shine a light. From the Lock Screen, deep-press the icon on the bottom left, or open the Control Center and tap the Torch icon there. Or you can say, "Hey Siri, turn on my torch". Long-press the Control Center Torch icon to set its brightness. Take your iPhone with you, and you'll always have a torch handy.



## Emergency location

**28** What3Words is a free app that everyone should use. It divides the world into three-meter (9.8ft) squares and gives each square a unique combination of three words. If you're lost

or injured, you can use the app to get your three words, and pass them on to the emergency services, who can use them to find you — even if you've run into difficulty at sea.



## Find your car

**29** Do you forget where you parked your car? Siri can help. After parking, open Siri and say, "Save my parking spot". Siri then remembers where you parked. When

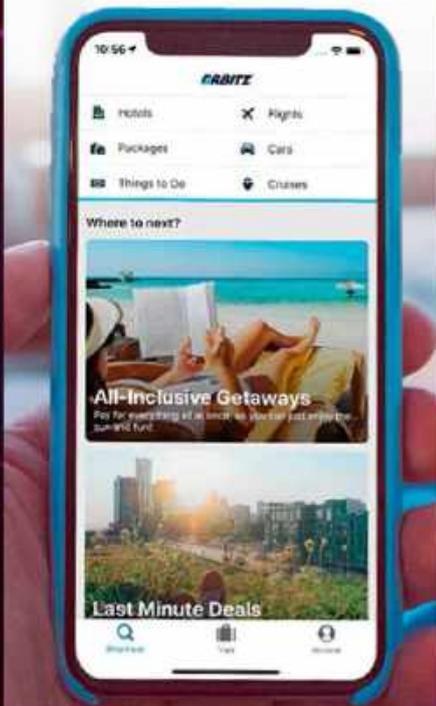
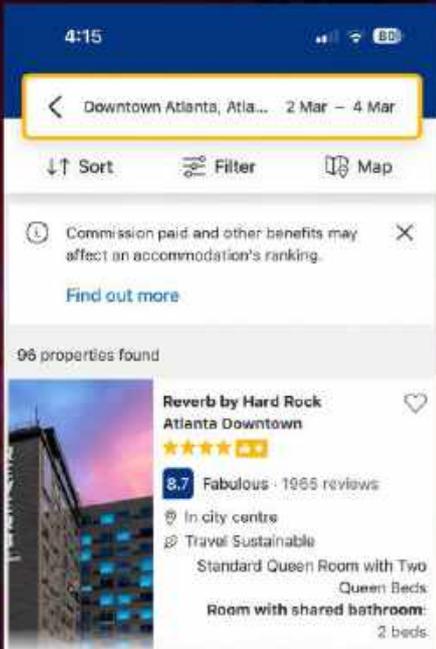
you're ready to return to your car, open Siri again and say, "Where am I parked?", and you'll see the Maps app open again, and provide directions to your parking spot.



## Upgrade your photography

**30** The iPhone's Camera app is an everyman's tool, designed to be simple to use and accessible. If you want greater control over your smartphone photography, you need a third-party app. Luckily, there are plenty to choose from. Camera+ (free, IAPs) gives an excellent range of camera settings, and lets you shoot in Raw too. Its main competitor is ProCamera (\$13.99), which has great low-light capabilities as well as an excellent feature set.

Halide Mark II (free, IAPs) offers a range of features, ProRAW compatibility and is perfect for hardcore photographers. If you're keen on long-exposure pics, try Slow Shutter Cam (\$1.99); though it's likely to augment rather than replace your main camera app.



**Book a hotel**

**31** There are several free apps that let you book a hotel visit from your iPhone. Booking.com enables you to search through 27 million venues, and filter by price, amenities and more. Travel fare aggregator Orbitz offers car rentals as well as travel, and also look out for Travelocity, Priceline, Hotwire, and Kayak.



**Calculations**

**32** The Calculator app does more than you think. Turn it sideways and it becomes a scientific calculator. Touch and hold a calculation result and you can copy and paste it into another app, and swipe a figure left or right to delete the last digit. If you need a calculator with even more power, try the PCalc app (\$9.99).

**One-handed typing**

**33** If you want to keep a hand free while using your iPhone, you can switch to a one-handed keyboard by going to Settings > General > Keyboards and choosing One-Handed Keyboard there. Alternatively, tap and hold the globe icon under the keyboard and select it there. It can be set to sit on the right or the left side.



**Scan documents**

**34** You can use your iPhone to scan a document directly into the Notes app. Open a note (new or otherwise) and tap the Camera icon for a menu. Tap Scan Documents, then hold your phone over the document. Tap the shutter button to scan, then drag the corners of the document to adjust it. Tap Keep Scan to save.



**Find movie theater times and prices**

**35** If you're a big-screen film fan, check out free apps like Fandango, Atom or Flixster. They're great for seeing what's on near you, finding where a specific movie is showing in your locale, buying tickets and more. Check whether your local theater has its own iPhone app too. If it's part of a chain, it probably will.

**Add your signature**

**36** To sign a document on your iPhone, scan it into the Notes app (see #34 above), tap the Share icon, then choose Markup. Next, press the "+" icon in the toolbar at the foot of the screen for more options. Tap Signature, and then select a saved signature or add a new one. Finally, drag it to the correct place to sign the document with your signature.

## Gig alerts

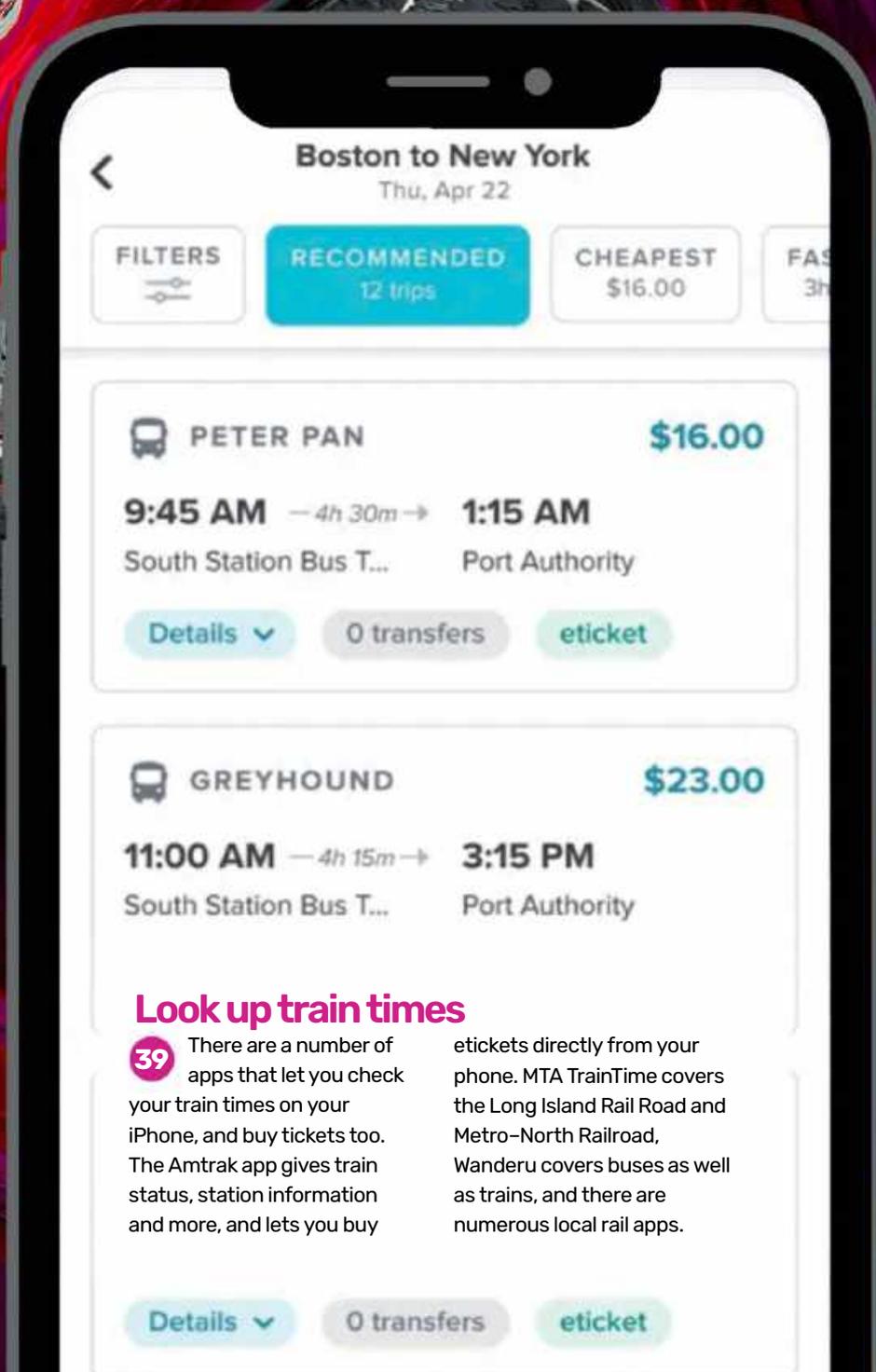
**37** If you like live music, comedy and theater, download Songkick Concerts. You can track your favorite artists and get a notification as soon as they announce tour dates nearby. You can even buy tickets from the app. Look out too for DICE, Ticketmaster (which covers sports and theater as well as music), and Bandsintown.

## Remote controls

**38** If you keep losing your TV remotes down the back of the couch, there's an alternative in your pocket. Go to Settings > Control Center and add Apple TV Remote to access a remote controller for Apple TV from the Control Center. There are remote apps for Kodi, Roku, Samsung TVs and more, and several for universal remotes.

## Your banking

**40** Does your bank offer an iOS app? Most do. Obviously their features depend on the app in question, but with a banking app, you're likely to be able to check your balances, move money from one account to another, pay off your credit card, and even use the iPhone's camera to pay in a check. No need to take a trip to the bank.

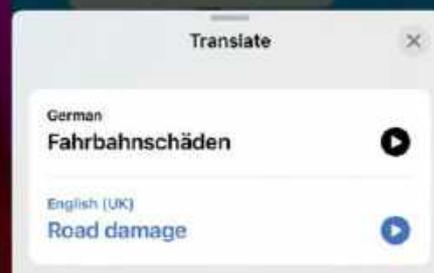


## Look up train times

**39** There are a number of apps that let you check your train times on your iPhone, and buy tickets too. The Amtrak app gives train status, station information and more, and lets you buy

etickets directly from your phone. MTA TrainTime covers the Long Island Rail Road and Metro-North Railroad, Wanderu covers buses as well as trains, and there are numerous local rail apps.

## Fahrbahnschäden



## Translate notices

**41** You can use your Camera app to translate foreign text on notices, menus, leaflets and more. Point the camera at the text, and when the yellow frame appears on it, tap the Live Text icon (horizontal lines within a square). Select the text to translate, then tap Translate (if you don't see the Translate option, tap the chevron).

## Use emergency SOS

**42** To contact the emergency services on your iPhone, you need to press and hold a Volume button and the Side button at the same time. You can then swipe the slider marked Emergency Call to contact the emergency services in your locale. Alternatively, you can click the Side button five times to get to the same screen.

# On the Apple Watch

Look what you can do with the world's best-selling smart watch on your wrist

## Record voice memos

**43** To record a short voice memo on your Apple Watch, open the Voice Memos app and tap the red button. It turns into a square as the app records. Tap the square to stop recording. The recordings appear on the Voice Memos app on your iPhone, where they can be reviewed, deleted, enhanced, shared and more.

## Countdown timers

**45** Apple Watch offers a great countdown timer which can track time for up to 24 hours. Open the app, and standard timers such as one minute, three minutes, five minutes, and so on are offered. Tap Custom to set a timer for any time you like. Alternatively, use Siri — say, "Set a timer for [x] minutes," and the timer starts.

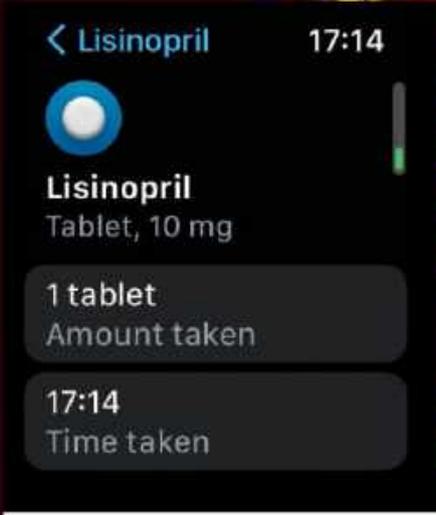
## Do an ECG

**47** Keep track of your heart's health with the built-in ECG (electrocardiogram) app. Open the app, and keep your finger on the Digital Crown for 30 seconds. You get a heart reading, including beats per minute and whether your reading shows signs of atrial fibrillation. This reading is then stored in your iPhone's Health app.



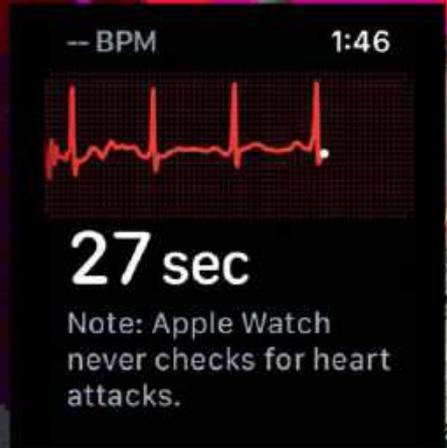
## Keep score

**44** If you like soccer, download the OneFootball app (free, IAPs). It lets you follow your favorite club teams from numerous American and foreign leagues, international teams, and get notifications on your Watch. Set it up and you're told when a match starts and ends, a goal is scored, a player gets cautioned, and more.



## Sort your meds

**46** A recent addition to the Watch is the Medications app. With it you can set reminders for when you need to take your meds, log your medications after you've taken them, and set up warnings should two medicines you're taking react badly to each other. You can add vitamins and other self-chosen medications too.



## Protect your hearing

**48** The Noise app measures the volume of the background noise and lets you know if it's loud enough to harm your hearing. Open the app and you're shown the current sound volume. In Settings > Noise on your Apple Watch you can set how loud it has to be before you get a notification, or turn off notifications altogether.





## Blood oxygen

**49** Another health benefit of the Apple Watch is the Blood Oxygen app. With your wrist flat and the Apple Watch facing up, tap Start. Hold your arm steady for 15 seconds while the test is run, and you receive the results. Tap the “i” in the results window for info on blood oxygen levels. Results are stored in Health.



## Find your devices

**51** The Find My app is available on all key Apple devices, including the Watch. It allows you to find lost or stolen Apple gear, showing their location on a map. You can make your misplaced device play a sound, receive a notice if you've left something behind, and mark a device as lost if you've given up hope of recovering it.



## Control Music and TV

**53** The app that looks like a play icon on a blue background is for Apple Remote. Pair the app with your Apple TV (third gen or older) and/or your Music library, and control your viewing or sounds from your wrist. The remotes aren't as comprehensive as the regular controls, but very handy.



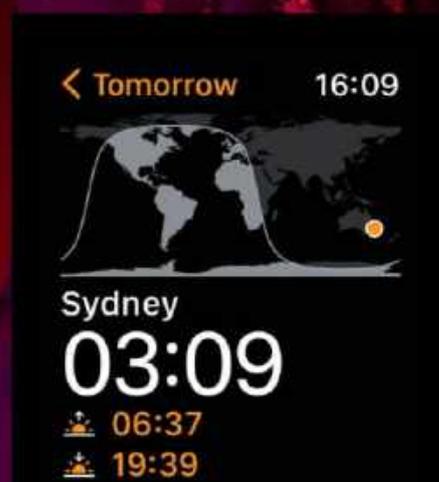
## Work out

**50** The range of different workouts on the Apple Watch is growing all the time. Open the app and scroll through them with the Digital Crown to take a look. Scroll all the way down and tap Add Workout to add more to the list. The three-dots icon (“...”) in the top left of every workout lets you customize your exercise to suit.



## Send & receive messages

**52** Messages is an excellent extension of the iPhone app. You can reply to incoming texts or send a new one, review conversations and send prewritten replies with the tap of a button. Other messaging apps that offer a Watch component are WhatsApp, WatchChat 2, Spark, and Telegram.



## World time

**54** You can add cities to your World Clock app directly from the Watch. Scroll the list up and tap Add City. Choose a city for more local-time information. If you want to set your Watch to a different time zone to your iPhone, open the Watch app and go to My Watch > General > Language & Region.

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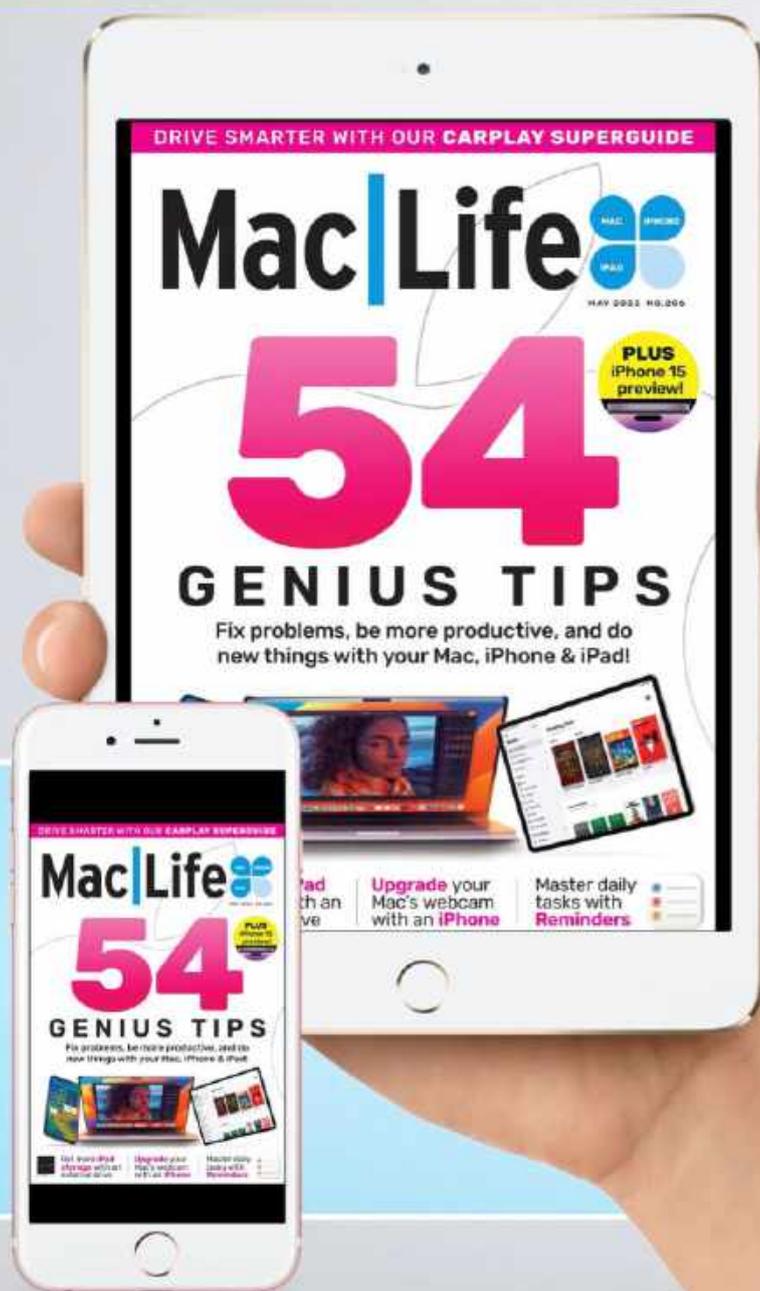
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# CREATE

HOW TO DO ANYTHING ON YOUR MAC, iPhone & iPad

## Collaborate with Freeform

Freeform is the ideal tool for brainstorming with colleagues remotely

### REQUIRES

macOS 13.1 or later,  
iOS 16.2 or later

### YOU WILL LEARN

How to use collaboration  
features in Freeform  
and beyond

### IT WILL TAKE

30 minutes



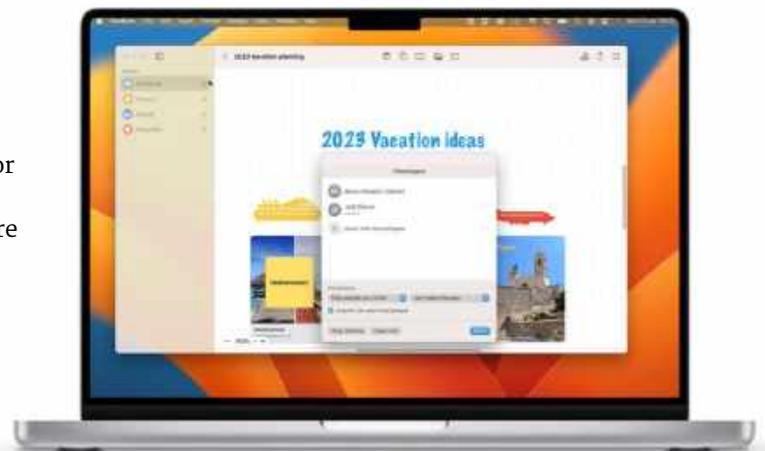
**APPLE HAS BEEN** adding collaboration and sharing features to macOS, iOS and iPadOS for several years now,

allowing you to work with others in applications like Pages, Numbers, and even Notes. But it's in a new Apple app, Freeform, where some of the most interesting opportunities to collaborate lie.

In some ways, it's a surprise that Apple, a company whose roots are in making products for creative professionals, took as long as it has to release software that provides tools to help kickstart the creative process, essentially creating the digital equivalent of a meeting room and a whiteboard. However, now that it's here, it's easy to

see how Freeform could quickly become very popular, particularly among creative teams who work remotely.

Here we take a look at how to get started with Freeform's collaborative features, and the ease in which you can share your work with others. **KENNY HEMPHILL**

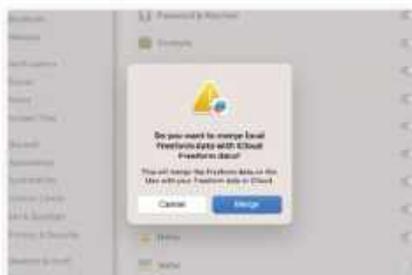


## HOW TO Get started in Freeform



### 1 Set up collaboration

To start collaborating, you need to turn on iCloud in Freeform. Launch Freeform on your Mac, click Shared in the sidebar, then click "Go to Settings". In Settings, click iCloud, scroll to Freeform and switch it on.



### 2 Finish iCloud setup

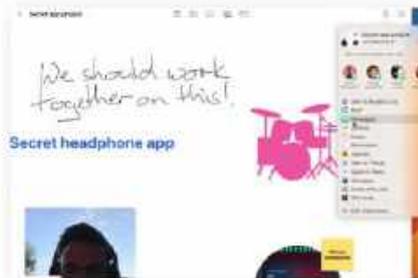
If you have already used Freeform on an iPad or iPhone and have created boards, it will now ask if you want to merge your Mac-based Freeform data with your iCloud Freeform data. To do that, click Merge.



### 3 Manage sharing

To edit sharing settings, Ctrl-click on the board and choose Manage Shared Board. In the window that opens, click the "+" button to share with more people and use the options to control how the board can be edited.

## HOW TO Team up using Messages



**1 Share in Messages**  
If you use Messages to collaborate on a Freeform document, you can see updates in Messages when someone makes changes. Open the Freeform board you want to share, click the Share icon and choose Messages.

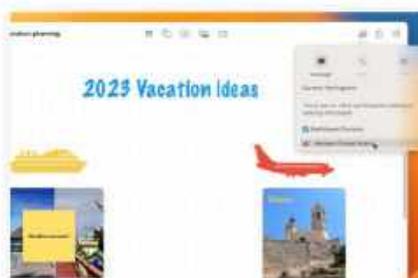


**2 Pick collaborators**  
When Messages opens, you'll see a new message with a link to the Freeform board. Start typing the name of the person you want to collaborate with in the Send field. Choose a contact from the list that appears.



**3 Set the parameters**  
You can add collaborators by adding more names in the Send field. Next, click the text below the thumbnail of the board and choose how you want to share the board and the permissions for participants.

## HOW TO Go deeper with collaboration



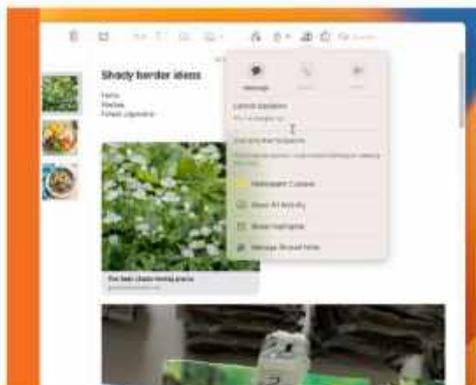
**1 See others' work**  
In a board you're collaborating on, click the head-and-shoulders icon to see collaborators. Check Participant Cursors. You'll see the additions they make. Participants can only undo and redo their own changes.



**2 Add more people**  
Click the head-and-shoulders icon on the board to add people and choose Manage Shared Board. Click Share With More People. Choose a suggested person or click on an application to share the board.



**3 Remove collaborators**  
In the Manage Shared Board dialog, hover the pointer over a name, click "...", and choose Remove Access. To stop sharing a board altogether, click Stop Sharing at the bottom of the box.



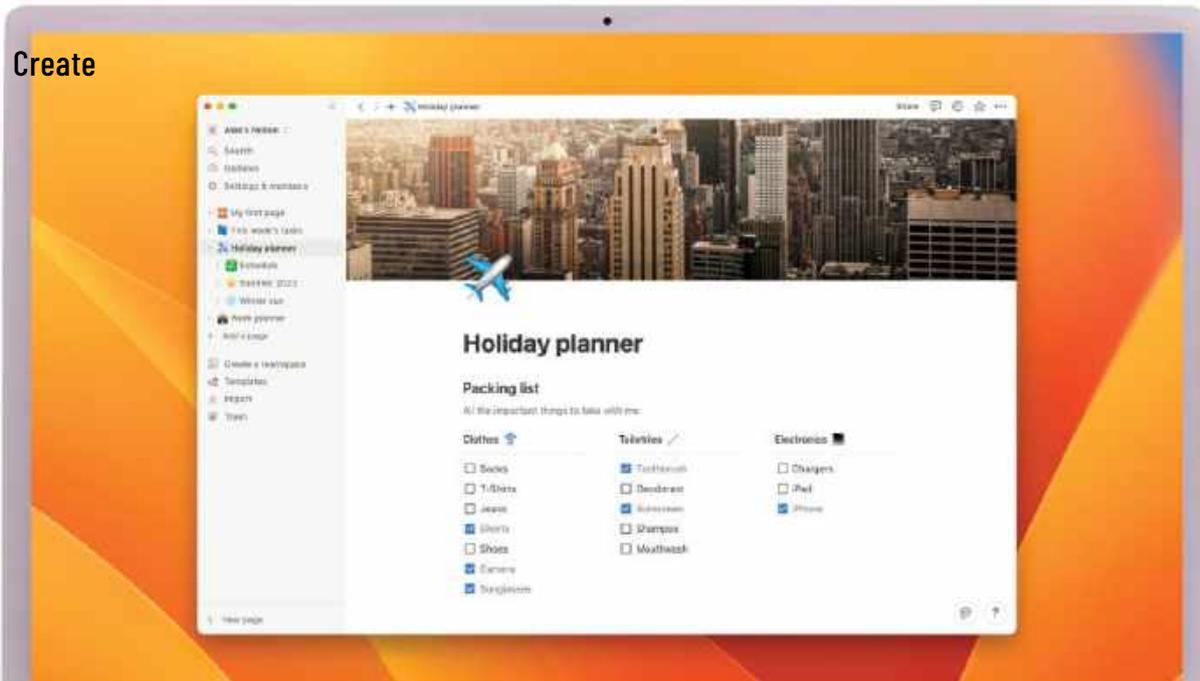
## > WORK TOGETHER IN OTHER APPS

### Sharing files with others made simple

Pages, Numbers, and Keynote all enable you to share documents with others and collaborate with them. Those you allow to do so can make changes to documents or add comments, and you can see those changes summarized the next time you open a document. Notes also now lets you collaborate the same way. All these apps use a Share menu to start the collaboration; you just choose how you want to collaborate and who with and they will be sent a link, with participants' edits being updated to the document in real time. Photos goes even further, enabling you to create a shared library with friends and family.



Create



# Boost your productivity

Use Notion to help organize both work and play activities

### REQUIRES

Notion (free, with IAPs), macOS 10.12 or later

### YOU WILL LEARN

How to create and manage pages and databases in Notion

### IT WILL TAKE

15 minutes



**TIRED OF TRYING** to manage your work and personal projects in a multitude of different apps?

Instead of juggling the likes of Dropbox, Airtable and Trello, try Notion. It can handle anything you throw at it, from simple text documents to sprawling databases with countless contributors, and is super-simple to use no matter what you want to do.

Notion's key strength is its ease of use. It comes with a friendly interface that lets you

drag and drop items, create databases and tables with just a click, and collaborate using tags and comments. That means you can plan your next holiday or keep track of your work assignments without a steep learning curve or having to switch apps.

Despite its extensive feature set, Notion is totally free to use. You can pay for some extra tools like more space for uploads and extra guest slots, but for most people that's not necessary. Getting all its best features for free is the cherry on top. **ALEX BLAKE**

## HOW TO Manage your tasks with Notion



### 1 Create a new page

Click New Page and add a title. If you just want to get started, press Return. Otherwise, pick a template and click "Get template" to add it. You can also import CSV and HTML files or content from third-party apps.



### 2 Click and drag

Start a new blank doc and begin typing. Click and drag the dotted lines to move a content block around. Press "+" to the left of the dotted lines to choose what type of content to add, including lists, headers, sub pages, and more.

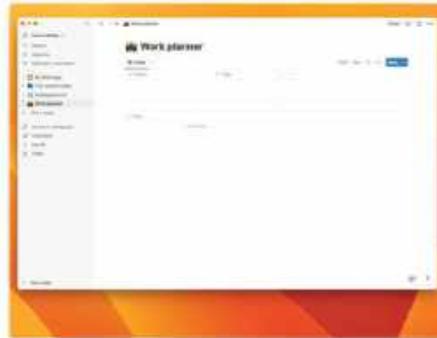


### 3 Convert a block

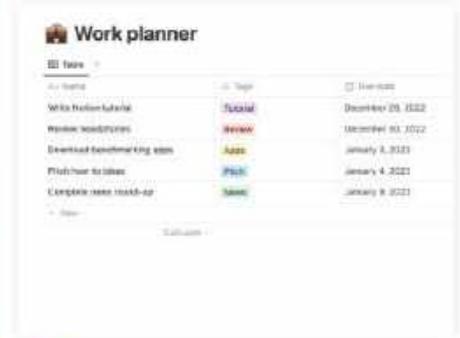
Ctrl-click a block and hover the pointer over "Turn into". You will see a huge list of options. This lets you quickly transform plain text into a checklist, for example, or switch from a one-column layout to a five-column one.



**4 Page organization**  
 You can add page icons and header images, and rearrange your pages in the sidebar. To add a sub page, click “+” next to the page name in the sidebar. You can embed or link to other pages and databases within each page.



**5 New database**  
 Databases are collections of pages, and can be organized in various ways. Click “New page”, then Table (under Database). Under “Select data source”, click “New database”. We’ll convert this into a project management board.



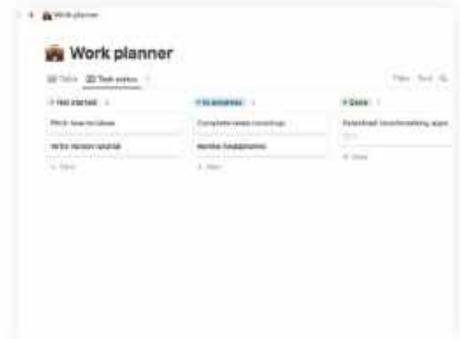
**6 Add some entries**  
 Start by adding some data. We’ll use this to manage our work, so under Name, add some tasks you need to do. Add some tags, then click “+” in the third column and pick Date from the list, before adding some due dates.



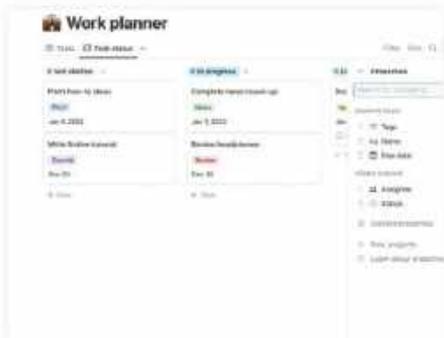
**7 Card details**  
 Hover over an entry and click Open. This displays each entry’s details, where you can add comments, attach files, assign colleagues, and more. Try adding a comment, or click “Add a property” and choose from the list.



**8 Display options**  
 Under your table’s title, click “+” next to the word Table. Now choose a new view for the content. Board lets you drag and drop items between categories, while Calendar might be helpful if you’ve assigned due dates.



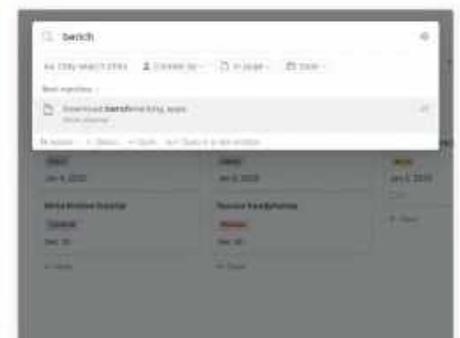
**9 Board view**  
 Click Board from the view list. Under “View name”, type “Task status”. Click and drag the columns to reorder them, if you like. Now you can quickly switch between views when required, or add another view if it suits.



**10 Show more info**  
 By default, all properties except the item name are hidden. Next to the blue New button, click “...” followed by Properties. Now drag anything you want shown to “Shown in board” and you’ll see it without clicking the task.



**11 Add a filter**  
 Click Filter and you can choose from basic or advanced filters. A simple date filter can highlight any items that fall between two dates. An advanced filter can use multiple criteria to find items, which helps in larger datasets.



**12 The search tool**  
 Lost something? Notion has a powerful search feature that can help. Simply press Cmd+P and start typing. You can adjust search filters on the fly and results will start populating every time a letter is added.



Create



# Edit your PDFs with ease

Adjust, sign and annotate PDFs with PDF Expert

## REQUIRES

PDF Expert (\$79.99/year), macOS 10.13 or later

## YOU WILL LEARN

How to adjust your PDFs with a host of tools in PDF Expert

## IT WILL TAKE

10 minutes



**WHETHER WE LIKE** it or not, most of us regularly work with PDFs. Editing these files can be unwieldy, provoking more frustration than anything — unless you have PDF Expert at your disposal. This app has an array of tools designed to help make managing your PDFs much easier. You can edit text, fill out forms and sign documents, banish blotches and unwanted imperfections, and rearrange pages with a quick click and a swipe.

There are various reading modes (including Split View) designed to ease the burden on your eyes, while you can export to different formats to share with others. And if you have an iPad, you can annotate your files with handwritten notes and signatures with the help of an Apple Pencil. So instead of struggling along with the limited PDF tools in other apps, you may find that PDF Expert makes things a whole lot more bearable. It's an incredibly useful app to have by your side. **ALEX BLAKE**

## HOW TO Work with PDFs in PDF Expert



### 1 Sign documents

Click the Annotate tab > My Signatures, then click the "+" button to sign a file. Add a signature by typing, using a trackpad, or adding an image, then click Create. Drag it onto a document and resize if necessary.



### 2 Fill out forms

PDF Expert recognizes forms, including checkboxes and drop-down menus. In a form, click inside a box (highlighted in purple) and start typing. If there are no interactive purple boxes, click Annotate > Text to add text.



### 3 Annotate your files

In the Annotate tab, the top row of buttons has various annotation tools. Some, like the highlighter and underliner, automatically snap to lines of text. You can add stamps, sticky notes, shapes, and more to your file.



**4 Edit text**  
Click the Edit tab, then select Link. After highlighting some text, you can add a URL. Or, click the Redact button and highlight text to black it out or erase it. Finally, you can click Text to change the words on the page.



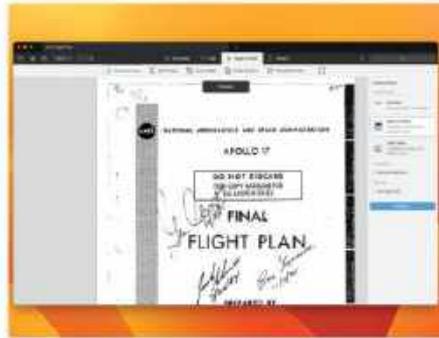
**5 Change the font**  
If text is too small, click Edit > Text, highlight the text in question, then increase the font size in the right-hand sidebar. You can also change the font, weight, color, and alignment to make it easier to read.



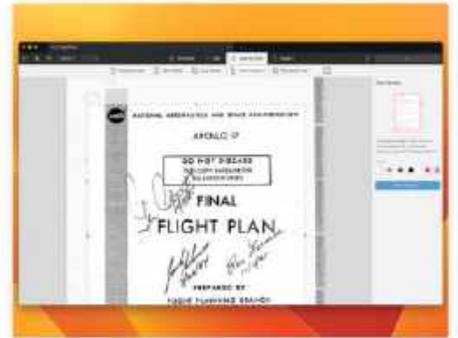
**6 Choose a theme**  
PDF Expert has a few themes to make viewing easier. Click View > Themes and choose either Day, Sepia, or Night. Each theme's colors also affect the content you're viewing, so a white page turns black in Night mode.



**7 Work with images**  
Click the Image button, then select an image on the page. In the right-hand sidebar, you can rotate the picture, crop it, replace it, or export it. To add a new picture, click Edit > Image, then click anywhere on the page.



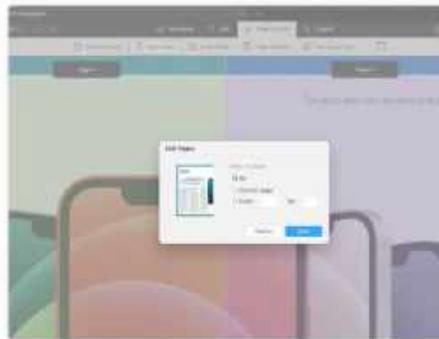
**8 Enhance your scans**  
Sometimes, scanned documents don't look their best. To fix things up, click Scan & OCR > Enhance Scan. Here, you can convert the scan to color or black and white, remove distortion effects and blemishes, and more.



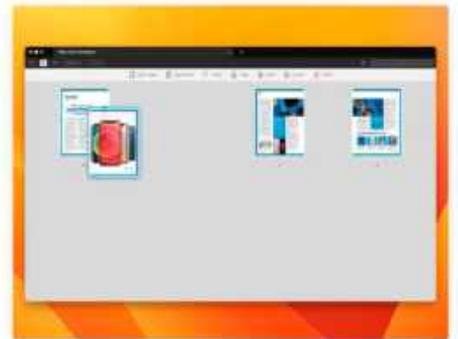
**9 Clear margins**  
If you have a scanned page and want to clear the sides for notes, click Scan & OCR > Clear Margins. You can drag the margins to set how much space is cleared and choose the margin color. Then click Clear Margins > Apply.



**10 Recognize text**  
If you need to make text in an image selectable, click Scan & OCR > Recognize Text. Choose your language and click Recognize, decide how many pages to scan, then click Apply. You can now select the text in the PDF.



**11 Split, merge, crop**  
Got two pages side by side? Click Scan & OCR > Split Pages to separate them. Or click File > Merge Files to combine two or more PDFs. You can also cut out distractions like page gutters with Scan & OCR > Crop Pages.



**12 Reorder pages**  
You can rearrange pages by clicking the Page Thumbnails button in the top left, then clicking and dragging a page to reorder it. This menu also lets you rotate, copy or extract pages and append fresh pages to the file.



# How to use Continuity Camera

Why buy a separate webcam when you can use your iPhone?

## REQUIRES

macOS 13 or later, iOS 16 or later (some features require a recent iPhone)

## YOU WILL LEARN

How to use Continuity Camera

## IT WILL TAKE

30 minutes



## GENIUS TIP

If you tap Disconnect on the iPhone screen, you will have to connect it to your Mac with a cable to use it as a webcam again.



## APPLE'S CONTINUITY SUITE

of features has been around for years. It's this feature set that enables you to use your iPhone as a scanner for your Mac, for example. The latest addition to the suite, Continuity Camera (confusingly, it has the same name as the scanning and photo features), enables you to use your iPhone as a higher quality webcam for your Mac when making FaceTime, Zoom or Teams calls. In fact, you can use this feature with any application that would normally use the FaceTime camera on your Mac.

Using your iPhone in this way not only gives you more flexibility in where to position the camera, but allows you to make use of some of the features of recent iPhone cameras. For example, more recent iPhone lens systems work much better in lower light than the FaceTime camera on a Mac.

## READY FOR YOUR CLOSE-UP

More impressively, Desk View makes use of the Ultra Wide setting on the iPhone 11 and later to allow you to show a top-down view of your desk and your face at the same time.

You can use Portrait mode to blur the background or Studio mode to dim it while lighting your face. And Center Stage keeps you in the middle of the frame when you move around.

You can choose whether or not to use your iPhone's microphone for calls, and if you do, you can isolate your voice from ambient noise or do the opposite and capture all the noise around you as well as your voice.

**KENNY HEMPHILL**



Belkin's \$29.95 iPhone Mount with MagSafe is one of several gadgets that enables you to use the MagSafe magnet to mount your iPhone on your Mac.

## HOW TO Use your iPhone as a webcam



### 1 Get your iPhone ready

Your iPhone needs to be close to your Mac in order to use Continuity Camera. It also needs to be locked. You can charge it from a plug or from your Mac while using it.



### 2 Mount your phone

If you're using a mount, connect it and attach it to your Mac. If not, position your iPhone where it is stable and facing you. If you put the iPhone in landscape mode, most apps will be able to choose your iPhone automatically.



### 3 Choose the camera

Launch FaceTime. If it does not choose your iPhone's camera automatically, click the Video menu and select it. Most third-party apps should also choose it automatically. If not, use the device settings in the app.



### 4 Use Center Stage

To have your iPhone place you at the center of the screen, click on Control Center, choose Video Effects then Center Stage. Note though, that to use Center Stage you must have an iPhone 11 or later, excluding the iPhone SE.



### 5 Use Portrait mode

Portrait mode, which blurs the background, needs an iPhone XR or later. Click on Control Center, choose Video Effects then select Portrait. You should see an effect similar to using Portrait mode to take photos.



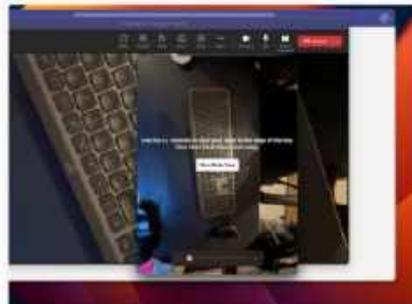
### 6 Turn on Studio Light

Studio Light illuminates your face and dims the background, useful for when you're sitting in front of a window. Go to Control Center and then choose Video Effects > Studio Light.



### 7 Try FaceTime Desk View

Start the call then click Desk View in the top right of the window. Use the Zoom control to zoom in or out. Click Start Desk View. If your desktop can't be seen, click Desk View then Share Desk View.



### 8 Desk View across apps

If you're using another video calling app such as Zoom or Teams, start the call and click Control Center, then click Desk View. Go to the screen sharing controls in the app and choose Desk View.



### 9 Change mic modes

There are two microphone modes. Voice Isolation prioritizes your voice and minimizes background noises such as traffic. Wide Spectrum captures everything. Click Control Center then Mic Mode to choose one.

# Master iPhone video controls

How to use different shooting modes and file formats in the Camera app

## REQUIRES

An iPhone (some features model-specific)

## YOU WILL LEARN

How to master different video shooting modes and formats

## IT WILL TAKE

15 minutes



**WITH THE INTRODUCTION** of the iPhone 14 you can now shoot smooth, steadier videos in Action mode, but that's not the only type of video your iPhone can capture. In this tutorial, we're going to explore all of the video recording modes available to your iPhone's camera, explaining what they are, how they work, and how you can make the most of them.

We'll be covering Action mode, shooting in HD, 4K, and the amazing Cinematic mode. Plus, we'll take a look at options such

as Slo-Mo, Time-Lapse, and Live Photo to expand your video shooting repertoire.

You'll also discover how to turn on the Apple ProRes format on Pro model iPhones. ProRes enables you to capture HDR (High Dynamic Range) clips that have a wider range of colors and tones than standard HD or 4K. HDR clips take up a huge amount of storage space, so we'd only recommend shooting in Apple ProRes if you need to edit and share clips to be viewed on HDR-compatible devices such as an iPhone 14 Pro.

**GEORGE CAIRNS**

## QUICK LOOK Make the most of your camera's capabilities



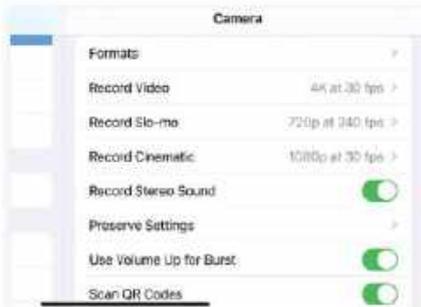
**A APPLE PRORES**  
On a Pro model iPhone tap here to toggle on the ProRes shooting mode (once you've activated it in Settings).

**B SHOOTING TIME**  
A minute of 10-bit ProRes HD footage takes up 1.7GB of storage space. Maximum shooting time appears here.

**C SELECT A MODE**  
In the Camera app, swipe here to choose a shooting mode. The active mode will appear in yellow.

**D FRAME RATE**  
Tap here to change the resolution and frame rate. We're shooting at 4K res with a frame rate of 30fps.

## HOW TO Utilize every video mode



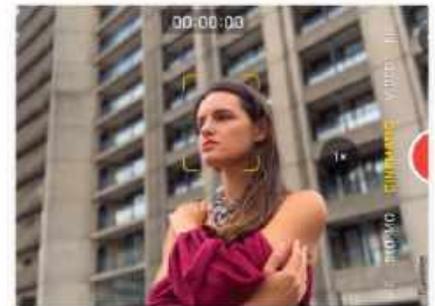
### 1 Specify file formats

Go to Settings > Camera. Here you can choose default video file sizes and frame rates for the Camera app, such as shooting 4K footage at 30fps. You can also change file sizes and frames rates from within the app.



### 2 HD or 4K

In the Camera app, swipe to Video mode. Tap top-left to toggle the resolution between HD and 4K. Tap to change the frame rate. 30fps is good for sharing HD files online; 24fps gives a more cinematic look on a 4K TV.



### 3 Cinematic mode

To give your footage a Hollywood look, swipe to Cinematic mode. This mode is similar to the Portrait mode in that it digitally blurs the video clip's background while keeping the main subject looking nice and sharp.



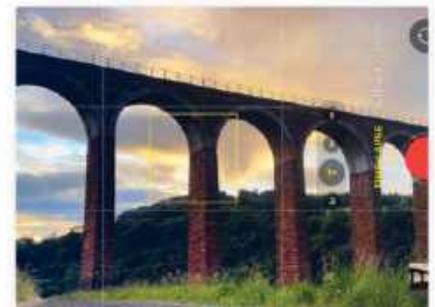
### 4 Pull focus

While shooting in Cinematic mode, the camera will usually focus on the person closest to the lens. You can tap on a background person (or object) to make them become sharp. A yellow box indicates the focal point.



### 5 Shoot slow-motion

Swipe to Slo-Mo. Tap top-left to shoot at 720P with a slow frame rate of 240fps to create a small (low-resolution) file. For higher quality choose HD 120. Tap the red button to record a slow-motion clip.



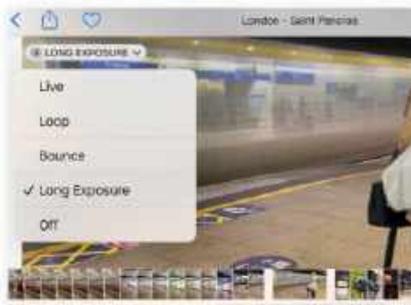
### 6 Time travel

To view the world in a creative and dynamic way, swipe to Time-Lapse mode. This causes the iPhone to capture approximately two frames per second. When you play the clip, subjects such as clouds move at high speed.



### 7 Action stations

The iPhone 12 and 13's sensor-shift optical image stabilization system reduces camera shake. When shooting video on the iPhone 14 range, tap the Action mode icon to capture even smoother handheld clips (up to 2.8K).



### 8 Live Photo

Live Photo mode captures a short video sequence that you can use in creative ways. In Photos, tap the top-left menu and choose Long Exposure. Moving objects become blurred (as if you'd shot using a slow shutter speed).



### 9 Enable ProRes

On Pro iPhones, go to Settings > Camera > Formats. In the Video Capture section choose Apple ProRes. In the Camera app, tap to turn ProRes on or off. You can edit ProRes clips in iMovie on iPhone to preserve their HDR quality.



# Get started with Mastodon

Fed up with Twitter? Mastodon offers a billionaire-free alternative

### REQUIRES

A browser, and a bit of patience

### YOU WILL LEARN

What Mastodon is and how to use it

### IT WILL TAKE

20 minutes



**MASTODON HAS BEEN** a big beneficiary of Elon Musk’s Twitter takeover; with the social media site in apparent chaos and lots of previously banned users being allowed back on, many people have been looking for a more pleasant alternative. And for many, Mastodon is that alternative. It has very strong anti-abuse rules, and with a bit of effort you can make it just as easy to use as Twitter.

It works a bit like email; in much the same way you can have yourname@iCloud.com or

yourname@gmail.com, there are different Mastodon servers for different people. Mastodon calls them “instances”, and there are instances for journalists, drummers, environmentalists... and so on. You can see posts from and communicate with people from other instances, just like you can email Gmail users from your iCloud mail.

In this tutorial, we’ll discover how to get started, and how to find out and follow other people. We’ll focus on the desktop here, but there are great iOS apps available too.

**CARRIE MARSHALL**

## HOW TO Set yourself up on Mastodon



**1 Find your place**  
Head to <https://joinmastodon.org> and click on Servers. This enables you to see a list of available servers and to sort them. For example, you can find instances dedicated to football or tech, or to specific cities or countries.



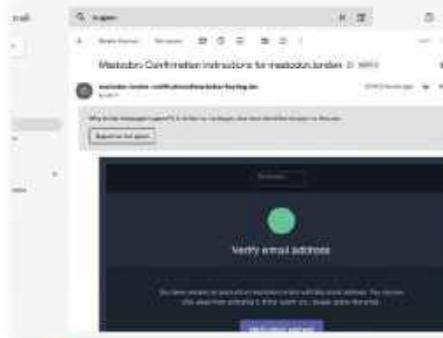
**2 Open an account**  
The Servers tab will show one of two buttons below a server name: Create Account or Apply For An Account. The former means anybody can join; the latter means the server vets new users to ensure they’re not a potential problem.



**3 Read the rules**  
Every instance has its own set of rules, and breaking them can get you banned from that instance. These rules, for the mastodon.london instance, are fairly typical and hardly controversial: nothing illegal, no hate speech, etc.



**4 Enter your details**  
All you need to do now is sign up with the instance by providing your name, preferred username and email address. You're signing up with a specific instance, not an app; you can use any app you like to access your account.



**5 Check your spam**  
Strangely, Mastodon confirmation emails often go straight to spam or junk. If you don't see an email verification link, it's probably been marked wrongly as spam. Find the message and click the link to activate your account.



**6 Look around**  
This is the web interface for Mastodon, and it has three columns. On the left is where you write your posts and replies. In the middle is where you see other posts, and at the right there are the various options to filter what you see.



**7 Look at Local**  
There are three views of Mastodon. The standard view is your own feed, which will contain posts from the people you follow. The Local view shows posts published in the instance you're on, in this case mastodon.london.



**8 Join the federation**  
The other view is the Federated view. This enables you to see posts from other Mastodon instances that your particular instance is federated with – many will be from people that other users on your server follow.



**9 Install an app**  
There are some good third-party apps for Mastodon for both desktop and iOS, and many of them are free. Although they may look different, they all work in much the same way. Let's try the free Mastonaut app (<https://mastonaut.app>).



**10 Pick your account**  
You have two choices here; you can log in with an existing Mastodon account, or you can create a new one. We'll use the Mastodon account we just set up, so we'll enter the name of our chosen instance in the field provided.



**11 Authorize your app**  
Whether you're on Mac, iPad or iPhone, the app needs to be authorized before it can connect to your account. You should automatically see the screen shown here, and clicking Authorize takes you back to the app.



**12 Find your people**  
You can also see which of your Twitter follows have Mastodon accounts. <https://movetodon.org> can scan your Twitter account, enabling you to follow some or all of the people who've got Mastodon links in their profiles.



# Connect external devices

You can connect your iPad to almost anything via the power of USB-C

### REQUIRES

iPad, USB-C cables or adaptors

### YOU WILL LEARN

How to use external storage and other devices with iPad

### IT WILL TAKE

10 minutes



### GENIUS TIP

Your USB-C iPad can charge your iPhone, AirPods or Apple Watch.



**ONE OF OUR** favorite things about the latest iPads is their USB-C port, which enables you to connect all kinds of devices.

USB-C is the most recent and fastest version of the standard, and it enables you to connect more demanding devices such as fast external storage. It also lets you charge your iPhone, AirPods, or Apple Watch; just connect the appropriate cable to your iPad



If you're into making music, USB-C enables you to connect external keyboards so you can play around in GarageBand.

and it'll share its battery. Your iPad can also move files to and from external drives and memory cards; connect to DisplayPort external displays; work with keyboards and mice; connect to USB interfaces for microphones and musical instruments; and you can use it with adapters as an HDMI output or an Ethernet connector.

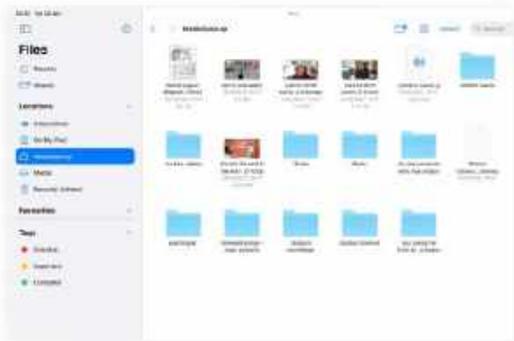
With the iPad Pro 11-inch (3rd gen) and the iPad Pro 12.9-inch (5th gen), you can daisy-chain devices to connect multiple Thunderbolt accessories simultaneously.

### SOME LIMITS APPLY

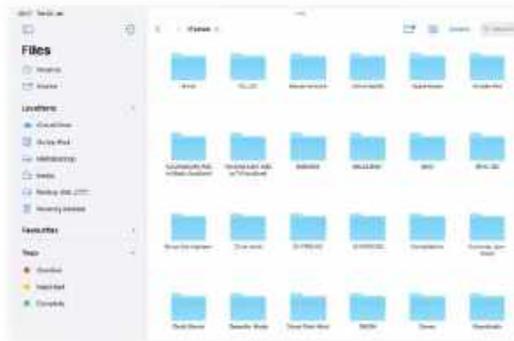
There are some limits to what you can do, however. USB webcams won't work in FaceTime, and while you can connect to external storage you can't format or partition it and it has to be formatted as FAT, FAT32, exFAT, or APFS. And some USB devices need more power than your iPad can provide, so for those you'll need to connect your iPad to a mains-powered USB hub.

**CARRIE MARSHALL**

## HOW TO Expand your storage with an external drive



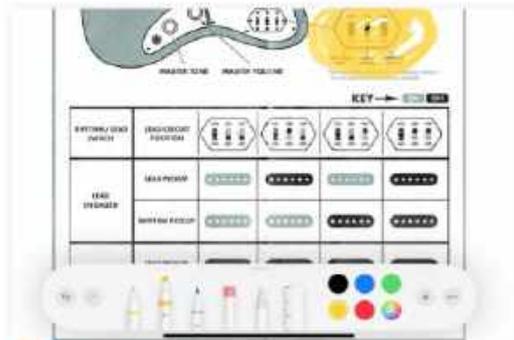
**1 Open up Files**  
When you connect a USB external drive or memory card, it'll show up in the Locations section of the Files app's sidebar. Some devices may need external power – if so, they won't show up until they're connected to power.



**2 Explore your documents**  
As you can see, external storage works just like your iPad storage – and you can drag and drop between the two. You can't format external storage from your iPad, though; for that you'll need to connect it to your Mac.



**3 Have a listen**  
One of the great things about USB-C is that it's very fast, and that means you don't need to copy media files from external storage to your iPad in order to play them. Here we're checking out a high-quality Apple Music track.



**4 Get marking**  
Everything on external storage works as it would if the files were stored on your iPad, so for example you can open an image and use Markup to highlight or annotate it, or use the Share menu to send it via Messages or Mail.



**5 View your videos**  
Provided they're in a format your iPad can play, you can even view videos in real time from your external storage – and, as you can see at the top and bottom of the screen here, you can instantly rotate the clip or scrub through it.



**6 Apply actions**  
Press and hold on a file or folder in the Files app to see this menu; this enables you to access the most commonly used file actions – including renaming, compressing, duplicating, tagging, or deleting files or folders.

### JARGON BUSTER

Thunderbolt was a faster alternative to USB, but the most recent versions of USB have caught up. The iPad Pro's USB-C/USB 4 port is also a Thunderbolt 4 port.

### GENIUS TIP

You don't need the most recent iPad to connect devices such as USB keyboards or audio interfaces to your tablet, but you will need a Lightning to USB cable or adaptor to connect them. It'll work with iPhone too.





# Make and take calls on your Watch

Use your Apple Watch to chat with friends – it's so easy and versatile

## REQUIRES

An Apple Watch, and someone else with an Apple Watch

## YOU WILL LEARN

How to use the Walkie-Talkie app

## IT WILL TAKE

10 minutes



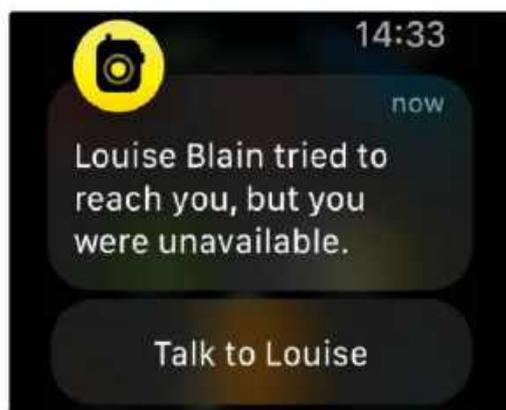
## GENIUS TIP

If you use Focus modes on your iPhone and Apple Watch to enable Do Not Disturb settings, they include the Walkie-Talkie app too.



**OUR APPLE WATCH** sometimes makes us feel like we're living in the future; at last, we have the wrist-based communicators our comics promised us as kids.

When someone calls, your Watch shows their name if they're in your contacts. Tap the green button to talk, the red button to send the call to voicemail, or the "..."  
(More) option to send the call to your phone



If someone tries to contact you via the Walkie-Talkie app when you're unavailable, your Watch will display a missed call notification.

or reply with a text message. You can adjust the volume with the Digital Crown and switch from Watch to Phone by unlocking your iPhone and tapping the green bar at the top of the screen.

And of course, you can phone people too. Simply tell Siri to call the person, or open the Phone app, scroll to the appropriate contact, and choose whether to make a phone call or a FaceTime Audio one.

## ROGER, OVER AND OUT

One of our favorite features of taking calls via Apple Watch is Announce Calls. If you go into Settings on your Apple Watch and tap on Siri > Announce Calls, Siri will tell you who's calling and ask if you want to take the call. All you need to do is say Yes or No. In this tutorial, we're going to focus on one of the lesser known voice-calling apps, Walkie-Talkie. If you have a friend, family member or colleague with an Apple Watch you can use the app for instant voice communication. All you need is for both Watches to be connected via Wi-Fi, iPhone, or mobile data (if your Watch is a GPS+ Cellular model). **CARRIE MARSHALL**

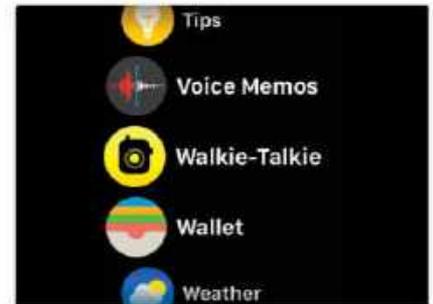
## HOW TO Chat to friends using Walkie-Talkie



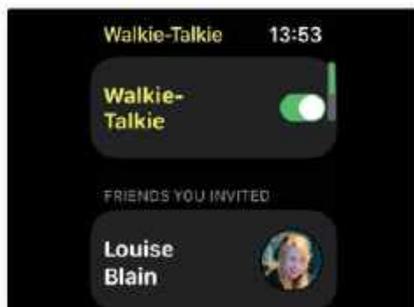
**1 Phone home**  
Open the Phone app and choose from your Favorite contacts, your recent calls list, or your full contacts list; you can also select a numeric keypad or access your voicemail here. If you prefer, you can call with a Siri command.



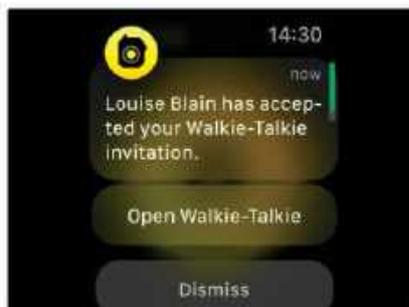
**2 Make the call**  
When on a call, you can mute your mic with the left-hand icon, hang up with the middle one, or access more options with the "..." button. This enables you to hand the call over to your iPhone. The Digital Crown adjusts the volume.



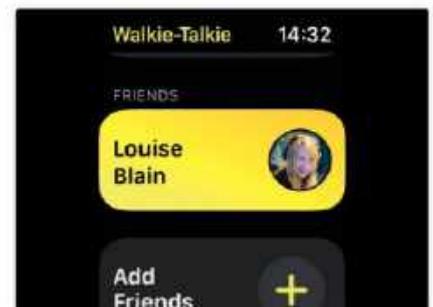
**3 Get Walkie-Talkie**  
The Walkie-Talkie app has been automatically installed on every Apple Watch since watchOS 5.3. If you've deleted yours to free up space, get it back by tapping the App Store and downloading it again. It's a free app.



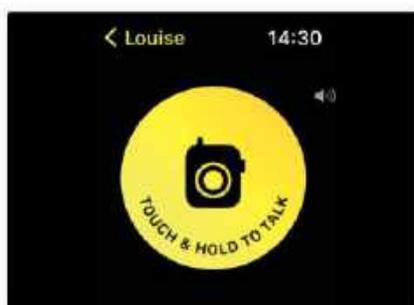
**4 Find a friend**  
You can't just start walkie-talkie-ing to everyone in your contacts list. You need to invite them to use the app. Scroll to the name of the person and tap Invite; you'll now see this display until they accept the invitation.



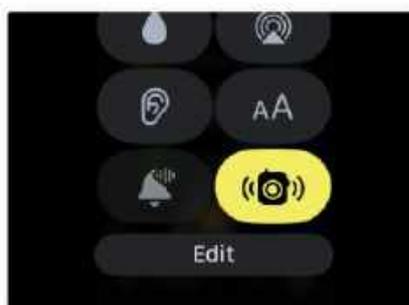
**5 Get ready**  
When your friend accepts, you'll get this notification, which includes an option to open the Walkie-Talkie app if you aren't already in it. Now when you go to the app you'll see your friend(s) at the top of the display.



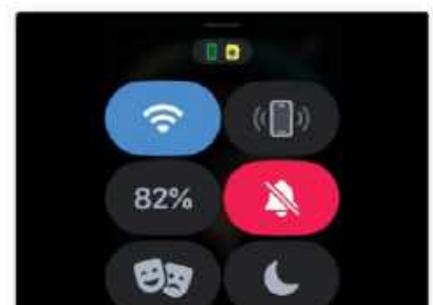
**6 Add more**  
Add as many other friends as you like. Walkie-Talkie uses FaceTime to communicate, so both of you will need to have set up the FaceTime app on your devices. You can remove friends from the list by swiping left on their name.



**7 Start the chat**  
Tap the name of your friend and you should now see this button. All you need to do now is hold the button when you want to talk and let go when you're ready to listen. Saying "over" at the end of each sentence is entirely optional.



**8 Set your status**  
If you don't want to be disturbed at any time of day or night, toggle your Walkie-Talkie availability in Control Center. The toggle is just the app logo: if it's black on a yellow background you're available. Tap it to become unavailable.



**9 See your status**  
When you've used the Walkie-Talkie app, you might notice the icon in tiny form at the top of the Control Center. That's where your Watch shows its different connection statuses, so if Walkie-Talkie is active it appears there.

# Spatial audio and dynamic head tracking

Experience immersive music and sound effects



## YOU WILL LEARN

How spatial audio and dynamic head tracking work on Apple devices



## KEY FACT

If your AirPods support spatial audio, the Music app will automatically play spatial audio for tracks that support Dolby Atmos. For non-Apple headphones, go to Settings > Music (iPhone and iPad), or Music > Settings > Playback (Mac). Under the Dolby Atmos option, select Always On.



**SPATIAL AUDIO HAS** been available on iPhone and iPad for a few years now, since it was introduced with iOS 14 in 2020.

It's taken Apple a while to extend the tech to a wider range of devices, but you'll now find it in the latest AirPods and AirPods Max, as well as Macs and the Apple TV box.

Spatial audio is designed to create an immersive sense of space when listening to music or watching video. Spatial audio is a bit like surround-sound speaker systems used in cinema setups, but instead of having to place multiple speakers around you, it is designed to work through headphones. It utilizes special algorithms, called HRTF (head-related transfer function) that convert two-dimensional stereo sound into a kind of "virtual surround sound" using the earpieces of your headphones.

Apple isn't the only company investing in clever audio tech. Sony's 360 Reality Audio format is available on many Sony headphones as well as streaming services, while Yamaha's 3D Sound Field tech claims to take any standard stereo audio and upscale it to the equivalent of five-channel surround sound.

However, Apple's version of spatial audio is actually based on the Dolby Atmos format, which has been a standard format for film soundtracks for many years, and is becoming increasingly popular for music recordings too. Spatial audio is supported on the latest third-gen AirPods (but not the second-gen AirPods that are still on sale), as well as the AirPods Pro and AirPods Max. However, Dolby Atmos is also widely supported on other types of headphones and speakers too, so you don't have to own a set of AirPods in order to listen to spatial audio on Apple Music.

But, Apple being Apple, it has introduced an extra twist, called dynamic head tracking. This is an additional feature that works in conjunction with spatial audio for music or video, but it requires special sensors that can monitor the movement of your head while you're wearing your headphones. These sensors are only built into the third-gen AirPods, AirPods Pro, AirPods Max, and

## HOW TO Configure your spatial audio settings



### 1 Sound all around

You can get an idea of how spatial audio works in Settings on iPhone or iPad. The Settings panel for AirPods shows how spatial audio differs from stereo, creating a sense of sound all around you, rather than just the left/right channels.



### 2 Control Center

Open Control Center while wearing AirPods, then press and hold the Volume control. You'll see the Volume slider with two smaller icons below it for adjusting noise cancellation and spatial audio. Tap on the Spatial Audio icon.



### 3 Spatial options

You have two options available if you decide to turn spatial audio on. The standard option is Fixed, which means that the sound doesn't change if you turn your head or get up and move around while watching video or listening to music.

## > SPATIAL SPEAKERS

Headphones aren't the only option for listening to spatial audio. You can play spatial audio using built-in speakers on the iPhone 7 or later, most recent iPads, and Macs with M1/M2 chips (for a list, see <https://bit.ly/3HFyVNm>).

These compact speaker systems aren't ideal for creating the rich, immersive sound that you really need for spatial audio. But, if you want to go to town, you can use the Apple TV 4K to connect more powerful speakers and soundbars for the full home-cinema experience — as long as those speakers also support Dolby Atmos.



You can team an Apple TV 4K up with a pair of HomePods for a true spatial audio experience.

Beats Fit Pro, so these are currently the only headphones that support dynamic head tracking as well as spatial audio.

### SPACE MUSIC

You can use dynamic head tracking when listening to spatial audio on Apple Music, but it works best for films or video that have a Dolby Atmos soundtrack. When you're watching a film with an Atmos soundtrack, the sound is "fixed" so that it seems to come from the same spot within your headphones. The spectacular opening scene of *Blade Runner* sounds great with spatial

audio, as Harrison Ford's hover car zooms towards you and the sound then pans off to the left as the hover car moves left across the screen. With head tracking turned off, that panning sound always comes from your left earpiece, because the soundtrack assumes you're always looking directly at the screen. But, when you turn on head tracking, the sound is automatically adjusted whenever you start to move your head away — in fact, if you face 180° away from the screen, the sound of the hover car switches to the right-hand earpiece of the AirPods to match the motion on the screen.

Spatial audio also works for music that you stream or download from the Apple Music service, as long as the tracks you're playing are marked as supporting "Spatial Audio With Dolby Atmos" (and there are several spatial audio playlists already set up to help you get started). Spatial audio can be really effective with a rock extravaganza such as *Bohemian Rhapsody*, with the shrieking Galileos flying through the air, or with dance tracks that really get you into the rhythm. However, the dynamic head tracking is less effective when you're listening to music — especially if you're also walking around while wearing your AirPods. Many people find that the constantly changing direction of the sound can be quite distracting, so check the steps (left) that show you how to adjust both spatial audio and dynamic head tracking to suit your preferences. **CLIFF JOSEPH**

### APPLE'S VERSION OF SPATIAL AUDIO IS BASED ON THE POPULAR DOLBY ATMOS FORMAT



#### KEY FACT

As well as simply turning spatial audio on or off, you can use a feature called Personalized Spatial Audio to improve 3D sound effects. This uses the TrueDepth camera on the iPhone X or later — which is also used for Face ID — to scan your head and ears and create a personalized profile that fine-tunes the spatial audio effect to suit the shape of your head.



### 4 Head tracking

The dynamic head tracking feature works best when watching video, as it can adjust the soundtrack so that the sound moves when your head moves, and always appears to come from the screen that is playing the video.



## Going against the grain

**WE'RE OFTEN OUR** own worst enemies when using our Macs. When what was once simple becomes tricky and tenuous, instead of following the line of least resistance, we insist on doing what worked in the past.

Apple silicon Macs are designed and built to run from their

internal SSD: it's remarkably quick, convenient, and thoroughly secure. While they can boot from external disks, and even a hard drive if you really want, that should rarely be a choice because of everything it loses.

Those who insist it's best face many challenges. Things to

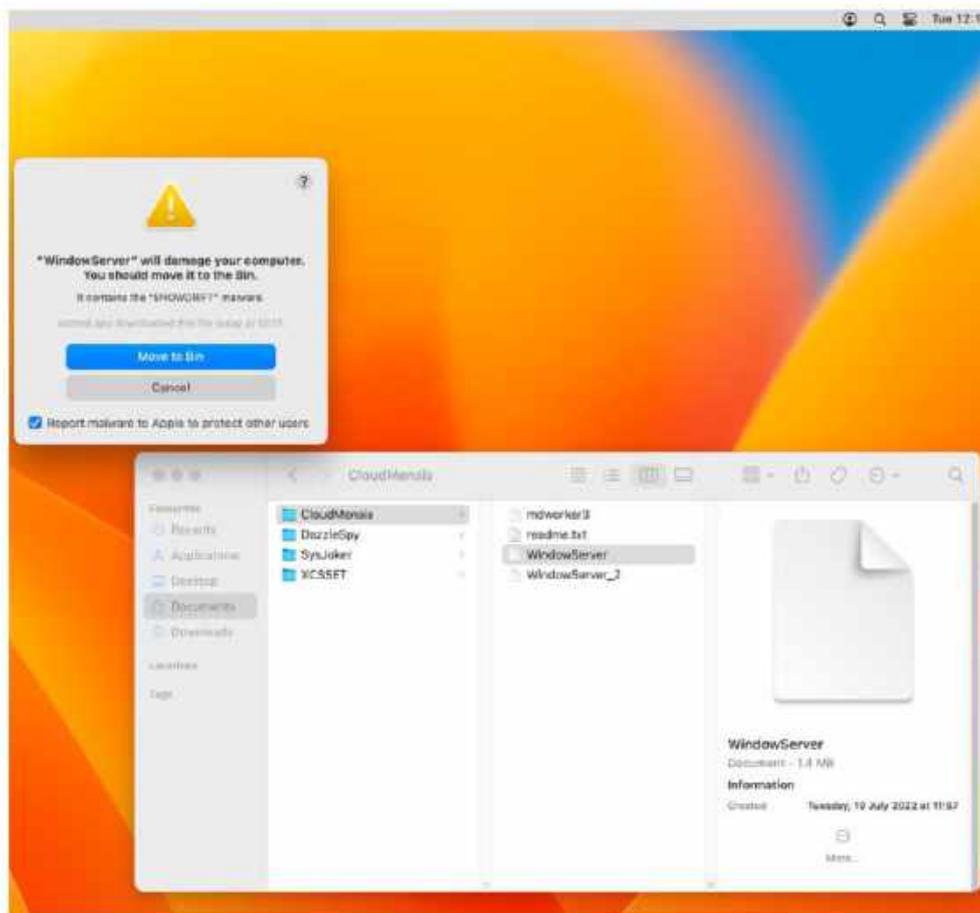
consider are: Can it work with a USB stick? Is FileVault encryption available? Can a single boot disk work across many Macs? What about booting older macOS? These can be fun projects for those who tinker, but when you want to get on and use your Mac, it's far better to go with the grain.

## > Is Ventura's protection good enough?

Do we still need to run third-party anti-malware software on our Macs?

Apple intends macOS to provide sufficient protection against malware, and last summer saw the introduction of new anti-malware scanning. We tested how well Ventura 13.1 detected four current malware samples with different security settings. Because macOS is now less reliant on apps being quarantined to trigger checks, malware was blocked effectively even when it had dodged quarantine. The new XProtect Remediator anti-malware scanner, active in Catalina and later, also proved it does both detect and remove known malware.

To fully benefit from built-in protection, your Mac must run the current release of macOS, which is fully patched against known vulnerabilities, in Full Security with all security systems including SIP and XProtect enabled. Effectiveness also depends on Apple's response to new threats by releasing Rapid Security Responses and updating scanning modules. Most of all, it relies on alert users behaving securely.



XProtect in macOS successfully detected and blocked this sample of the malware CloudMensis from being run.

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## > Sharing TV+ but not iCloud+

My partner has a new iPad. Can she share my Apple TV+ subscription without using my iCloud storage?



Sharing subscriptions to services like Apple TV+ and iCloud+ is controlled individually within a family group.

Family Sharing offers many options, and when set up carefully can provide family members with just the shared services you want them to enjoy.

The first step is to create your family group in Settings. Simply tap your name at the top, then choose Family Sharing, and Set Up Your Family following the instructions. In the course of those, you'll be prompted to send your partner an invitation to join your family group, starting the next step in the process.

You can always add others later by tapping the Add Member icon at the top right of Family in Settings. There are limits imposed on family membership; each Apple ID can be a member of only one family group at a time, and can only switch between different family groups once each year at most.

When your partner has been added to your group, the Family section in Settings shows what they can access and share, and gives you, as the Organizer, control over those settings. To share any of your existing subscriptions, in Settings > Family, tap Subscriptions, where those that are available for sharing will be listed.

Tap Apple TV+ to enable your partner to share that subscription, and they'll be sent an invitation. Once they've accepted, it will unlock Apple TV+ access on their iPad. Sharing iCloud storage is controlled separately through the same Subscriptions section, and requires an

iCloud+ subscription. As you're the Organizer, only you can offer that, similarly with Purchase and Location sharing.

## Quick-fire questions & answers

### WHAT'S THE MOST VERSATILE COMPRESSION APP?

Currently that appears to be Keka, which gives you the choice of 14 major compression formats with support for AES-256 and Zip 2.0 encryption, and can decompress more than 30 different formats. It's based on the same code as its popular and mature macOS sibling.

### HOW TO ACCESS THE MAGNIFIER MORE EASILY?

Its app is usually tucked away in the Utilities section of the App Library. For easier access, add it to the Control Center in that section of Settings, then you can swipe from the top-right corner to tap on its icon for use. You can also set it to open when you triple-click the side button, in Settings > Accessibility > Accessibility Shortcut.





# Mac Hardware

We help to solve your hardware hassles, from interrupted upgrades to running diagnostics

## Quick-fire questions & answers

### HOW TO USE M1 RECOVERY WHEN THE MOUSE WON'T WORK?

Charge the mouse fully, then enter Recovery mode by holding the Power button until you're informed that it's loading. To pair your mouse again, press the Power button three times in slightly less than three seconds. You should then see the Bluetooth Setup Assistant to help you pair it.

### COULD I REPLACE THE HARD DRIVE IN MY MAC MINI 2014?

Not easily. To access the drive in more recent Mac minis, you have to remove almost everything else from inside its case, including the logic board. This is shown at <https://bit.ly/3newFP>, requires special tools, and may need an upgrade kit if you're replacing it with an SSD.



## > More memory or larger storage?

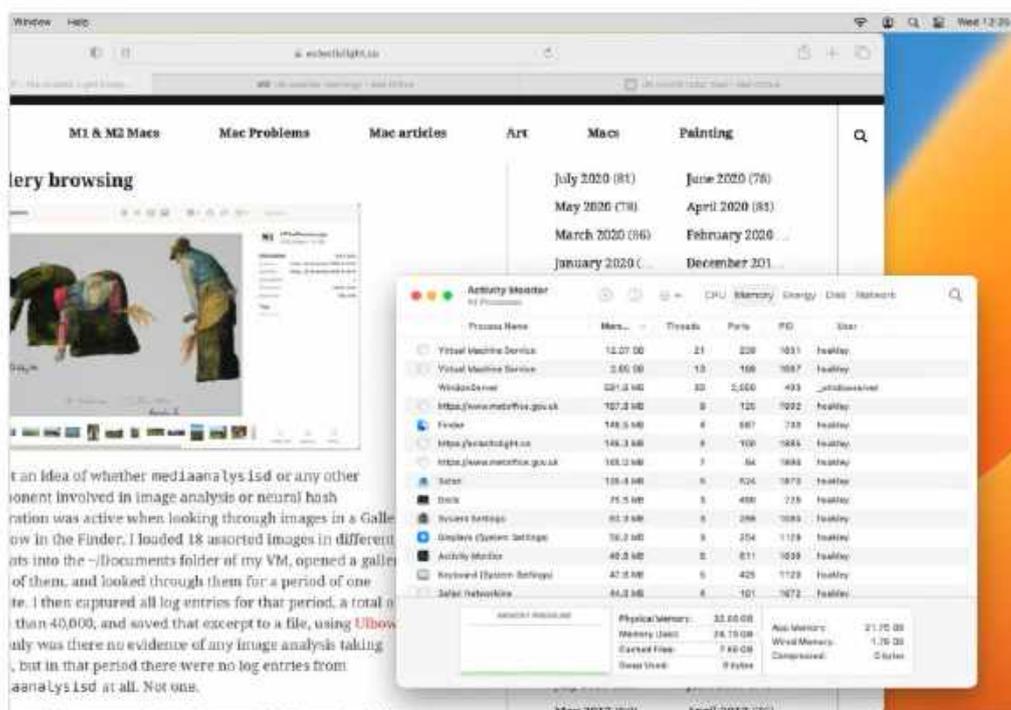
My current Mac mini has 16GB of memory, but I find it sometimes struggles when it's running major tasks. Should the Mac Studio I'm getting to replace it come with 32GB RAM and a larger internal SSD, or will I need to go for 64GB?

Trying to work out how much memory you need in a new Mac is never really an easy task, but one of the best indicators of your memory requirements is how much swap space your current Mac uses when working on those larger and more challenging tasks. MacOS manages memory very efficiently, and makes the most of all the physical RAM available to it. Activity Monitor's Memory view provides color-coded Memory Pressure and a figure for the amount of Swap Used, that's the space on its hidden VM volume used as an overflow for real memory.

If your Mac mini seldom goes into the red and uses little swap space with only 16GB of physical memory, your new Mac Studio should

do very nicely indeed with 32GB, allowing you to get that larger SSD. Although there are substantial differences in the way that Intel and Apple silicon Macs use memory, in practice the total required doesn't seem to differ that greatly.

You should also ideally aim to keep your Home folder and any currently active projects on your machine's internal SSD, although moving particularly large media libraries and less active projects to external SSDs is often a wise economy. Lastly, ensure that you keep at least 100GB of space free on your Mac's internal SSD at all times, and more than that number is even better, as that will really help to prolong its working life.





## > Removing the extra password

On my Intel MacBook Pro, recently I've had to enter my password before it will show the login window. How can I reset that?

This is probably because you've inadvertently set your notebook to use a firmware password, which has to be entered before it invites you to log in. To disable that, start it up in Recovery mode, holding the Cmd and R keys during startup. When the Utilities window appears, click Utilities in the menu, and choose Startup Security or Firmware Password Utility, whichever is available. In that, click to Turn Off Firmware Password. You'll then be

prompted to enter the firmware password one last time before it's removed.

Close that utility, and choose the Restart command in the Apple menu. Your MacBook Pro should then restart into normal user mode without troubling you for that firmware password. If you decide you want to enable it again, use the same procedure in Recovery mode, but turn it on instead and enter your chosen password.

## Quick-fire questions & answers

### HOW MUCH MEMORY CAN GO INTO AN iMAC 27-INCH 2017?

It supports a maximum of 64GB, installed as four matching 16GB 260-pin PC4-19200 DDR4 SO-DIMM modules (<https://apple.co/3JLvirC>).

### RUNNING HARDWARE DIAGNOSTICS ON APPLE SILICON?

Start up in Recovery. At the first Options screen, hold Cmd+D until told that Diagnostics is loading, then select the language for the Diagnostics Loader to run and offer Diagnostics. If that fails, Restart to Diagnostics using the menu.

## > Are more cores bad news?

When I ordered a new MacBook Air M2, the dealer mistakenly ordered one with a 10-core rather than 8-core GPU. Will it get hotter and suffer from a shorter battery life?

Your new MacBook Air will come with the standard four Efficiency and four Performance CPU cores, which bear the brunt of its work, use much of the power, and generate much of the heat in its chip. However, they're used very efficiently so that, when they're not required to run code, they draw almost no power at all.

The GPU handles accelerated graphics, and is again used on demand. When pushed, you should notice a difference in performance from the

extra two GPU cores in the model you're getting, but even if you do lots of graphics-intensive work on it, the difference in overall energy consumption and heat production should remain small relative to the total. Measurements for the 8-core GPU give a maximum power consumption of about 10W, and 13.5W for the 10-core, but with more cores it should

accomplish the same tasks more quickly. So this isn't likely to make any detectable difference in battery endurance, or in heat output.





# macOS

Shine a spotlight on the solutions to your most irritating Mac problems

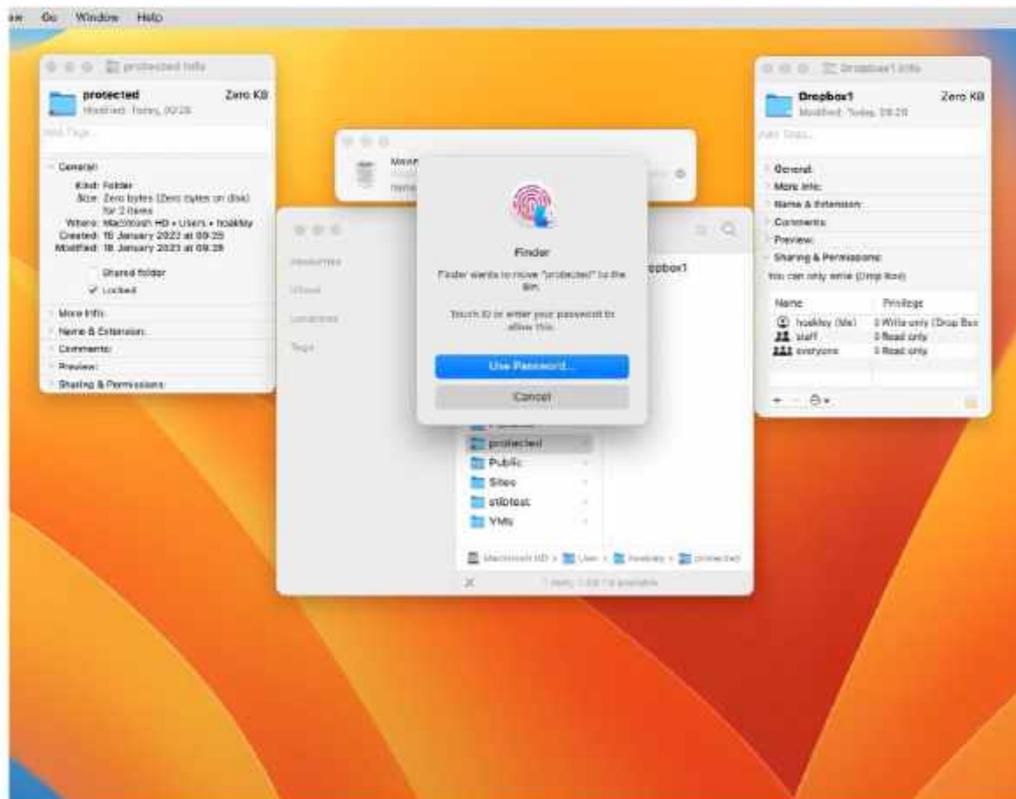
## Quick-fire questions & answers

### HOW TO REINSTALL THE MACOS 13.2 UPDATE?

Because Apple changed how macOS updates work in Big Sur, they now have a lot more work to do and can't be supplied as Installer packages in the way they used to. If you can't update through Software Update, the only alternative is to use the full installer app, such as that in the Mac App Store.

### HOW TO KEEP SENSITIVE FILES ON AN EXTERNAL SSD?

Using Disk Utility, add an APFS Encrypted volume to the existing container on that drive, giving it a robust password. Although perhaps not quite as secure as FileVault protection on your Mac's internal storage, you can eject the volume in the Finder when you're not using it.



## > Stop a folder from being deleted in error

I store sensitive documents in a folder with privileges set for write only access, as a drop box. Why then could I almost delete it by mistake? How should I protect it?

This is a common misunderstanding that often gives rise to problems and accidents. If you want to prevent a folder from being deleted using permissions, you have to change the permissions on the folder containing that folder, rather than the folder itself. This is because a folder or directory is essentially a list of its contents. If permissions allow you to change the contents of that folder, as here by adding new files to it, then they also allow you to delete the folder.

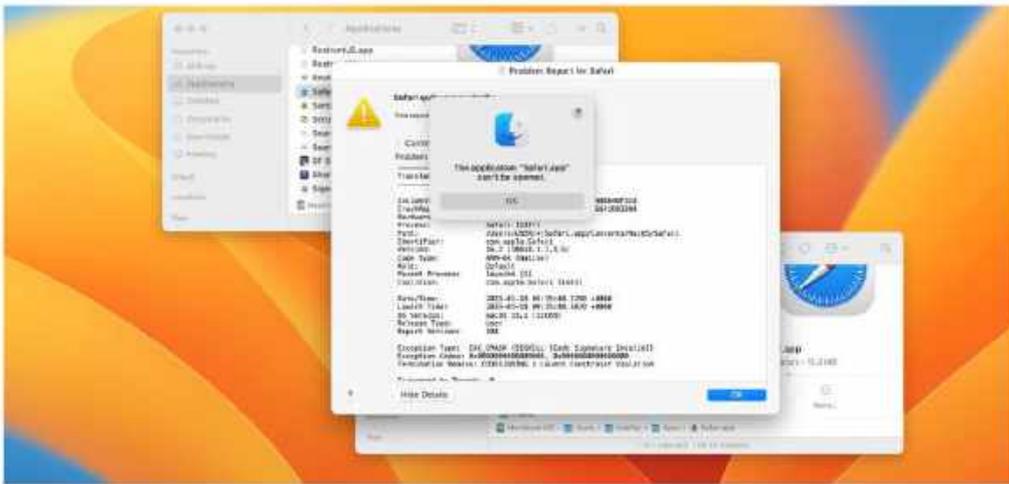
To protect your folder of documents using permissions alone, put that folder inside another folder, and set the permissions on that outer folder to read only. If you then try

to delete either of those folders you'll at least be prompted to authenticate, and that should hopefully set alarm bells ringing and stop you from trashing your documents.

Another useful tool here is locking the outer of the two folders. As with permissions, this wouldn't stop you from putting either in the Bin, but when you try to do so you're asked to confirm. Consider trusted alternative approaches too, including a separate APFS Encrypted volume, or an encrypted sparse bundle disk image, created using Disk Utility. These can be given protective permissions and locked, and both can be unmounted when you're not using them, unlike a normal folder.

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## Quick-fire questions & answers

### HOW MUCH FREE SPACE IS NEEDED FOR VENTURA UPDATES?

If you can plan to have at least 20, preferably 25GB, available then the update should complete correctly.

### WHICH DISK IMAGE FORMAT IS MOST SPACE EFFICIENT?

Sparse bundles make best use of storage space, but close behind them now are regular read/write disk images (UDRW format) when kept and used on APFS volumes – from macOS 12 they're normally stored as special sparse files.

## > Can you add a custom icon to Safari?

How can I put a custom icon on the Safari app in Ventura?

You can't change the icon of any bundled app in macOS Ventura, as they're now kept in read-only storage. Most are on the Signed System Volume (SSV), which is a read-only snapshot. Some come in cryptexes, special secure disk images that also can't be changed. Older versions of macOS let you work around this by copying the app to the Data volume,

where you could modify them. Try that with Ventura, though, and the signature is broken, so the customized app won't launch. You have one last chance: Safari Technology Preview, free from the Mac App Store, can have a custom app icon. This is a test-bed for new features that may be included in future releases of Safari, and often even better.

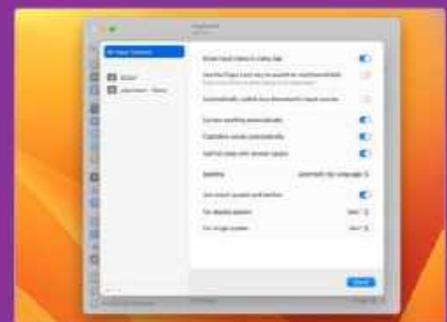
## > How to stop switching to the wrong keyboard



**1 Open Input Sources**  
 Although you can't delete an unwanted keyboard layout, you can make it harder to set by accident. Open System Settings and select Keyboard in the list at the left. In the Text Input section, where it says Input Sources, click Edit.



**2 Remove keyboards**  
 At the left of the Input Sources dialog, there's a list of keyboards set for your Mac. Remove those you don't want by selecting and clicking the "-" button at the foot of the list. Add keyboard layouts by clicking the "+" and selecting them.



**3 Show Input Menu**  
 You may also find it useful to show the Input Menu in the main menu bar. Select All Input Sources at the upper left, then enable that using the top control on the right. Once you've finished making changes, click Done to finish.

# The complete guide to CarPlay

From route directions to entertainment, Apple's CarPlay puts you in the driving seat. Here's how it works...

WRITTEN BY ROB MEAD-GREEN

**F**IRST LAUNCHED WITH iOS 7.1 in 2014, CarPlay turns your car's in-dash display into an iPhone display and controller in one. And it works brilliantly. With your iPhone hooked up to your car using either wired or wireless connections, you can easily use travel-friendly versions of apps such as Phone, Music, Messages and Maps, and CarPlay supports a growing number of third-party apps too.

Initially available on the 2014 Ferrari FF, CarPlay has now spread to over 600 car models from over 70 manufacturers, including household names such as Audi, GMC, Mercedes-Benz, and Volkswagen. Plus, it's available on a wide variety of aftermarket car head units too (we've included some options on

p55) so even if you own an older vehicle, you may still be able to use CarPlay.

CarPlay's other big advantage – aside from it being the easiest, and safest, way to use iPhone in a car – is that it's instantly familiar. Its interface and apps share many of the exact same features as your iPhone does. Plus, it works the same no matter which car you're using – so whether you're hiring a car for a weekend away, borrowing a car from a friend, or using a take-home vehicle, you'll feel right at home even when you're behind the wheel. And there's plenty of good stuff still to come.

So sit down, fasten your seat belt, and let's get started on your CarPlay journey. It's going to be quite the ride.







# What is CarPlay?

Upgrade your driving experience with easy access to everything you might need

**WHILE CARPLAY OFFICIALLY** made its debut in 2014, both the idea and some early implementations had been kicking around since 2008, one year after the original iPhone launched. That's when Apple teamed up with Mercedes-Benz to release a car with a 30-pin input port that enabled the infotainment system to access and control a connected iPhone or iPod.

The next major development came in 2010 with iPod Out, which Apple developed in conjunction with BMW. Officially announced at Apple's

## Car brands with CarPlay

- > Acura
- > Audi
- > BMW
- > Buick
- > Cadillac
- > Chery
- > Chevrolet
- > Chrysler
- > Dodge
- > Ferrari
- > Ford
- > Genesis
- > GMC
- > Honda
- > Hyundai
- > Infiniti
- > Jeep
- > Kia
- > Lexus
- > Mazda
- > Mercedes-Benz
- > Mini
- > Mitsubishi
- > Nissan
- > Slingshot
- > Polestar
- > Porsche
- > Ram
- > Rolls-Royce
- > Subaru
- > Suzuki
- > Toyota
- > Volkswagen
- > Volvo

Worldwide Developers Conference (WWDC) the same year, iPod Out enabled iPod and iPhone to output audio and video to a car's infotainment system and receive instructions from its control dials, switches and knobs. That joint Apple-BMW project resulted in a cross-platform standard for iPod/iPhone connectivity that other car makers could adopt for their vehicles, with BMW's arriving in BMW and Mini cars as PlugIn in 2011.

That was followed by iOS in the Car at WWDC 2013. iOS in the Car was renamed CarPlay in time for the Geneva Motor Show a year later. Initially, CarPlay was largely limited to Apple's own apps (Phone, Messages, Maps, Books, and others) but has since been extended to third-party app makers across seven main categories: Audio, VoIP, Messaging, Navigation, EV Charging (for electric

vehicles), Parking, and Food Ordering. CarPlay also supports apps made by car makers, enabling it to control features such as heating or air conditioning too. With the launch of iOS 16 in 2022, Apple also introduced Car Keys, which enables anyone with a compatible digital car key to use their iPhone or Apple Watch to lock or unlock their vehicle instead.

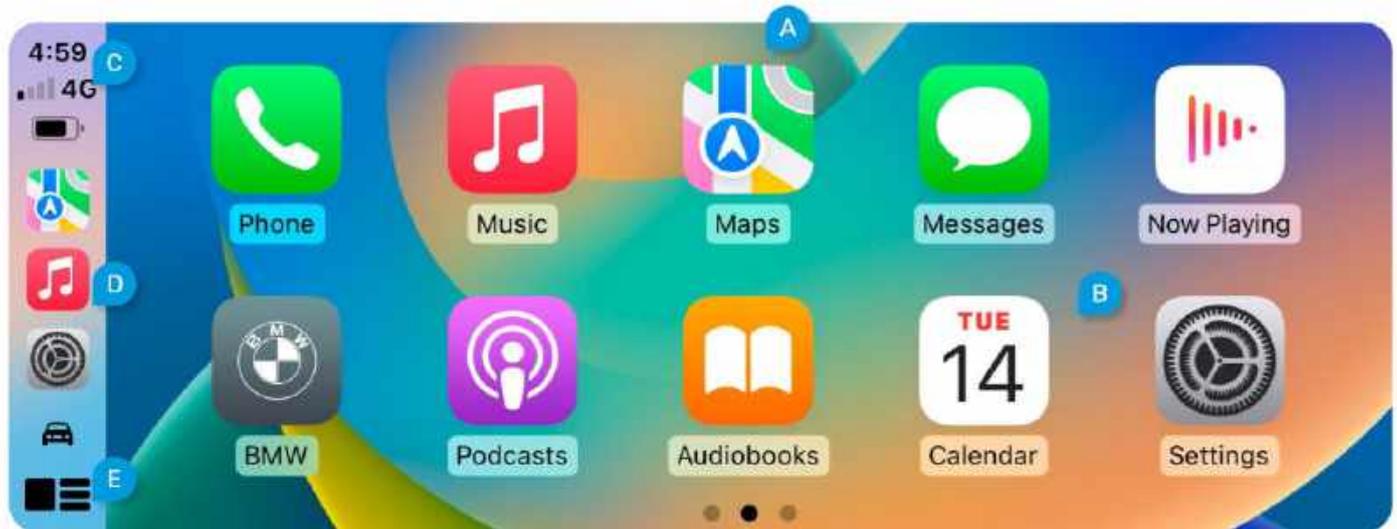
### THE NEXT JOURNEY

To use CarPlay, your car must of course be equipped with a CarPlay-compatible infotainment system and you'll need at least an iPhone 5 (including an iPhone 5c or SE). You can also equip your car with CarPlay-compatible head units from manufacturers such as Alpine, JVC, Kenwood, and Sony. Apple now plans to take CarPlay even further with big changes coming later this year, most likely with the launch of iOS 17.



Being able to access almost anything Apple while getting from A to B makes traveling such a breeze.

## QUICK LOOK Hands-on with CarPlay



**A HOME SCREEN**  
Just like on iPhone, the CarPlay interface can have multiple Home Screens, and apps can be rearranged in any order you choose.

**B CUSTOM BACKGROUNDS**  
With the arrival of iOS 16, you can now change your CarPlay background, with 11 different wallpapers to choose from.

**C IPHONE INFO**  
Here you can see the current time, cell phone signal strength, and the estimated battery life of your CarPlay-connected iPhone.

**D RECENTLY USED APPS**  
Your most recently used apps can be accessed from the CarPlay dock (which can be set to the right or left side).

**E CHANGE THE VIEW**  
Tap here to switch to the dashboard, where you can see running apps such as Maps, Music and Calendar, all in the same view.

## 5 best third-party accessories



**Sony XAV-AX4000**  
**>\$499.99**  
[www.sony.com](http://www.sony.com)  
This double-DIN multimedia receiver is CarPlay ready, and features a 7in touchscreen and support for High-Res Audio playback. It has a 4x 55W amplifier and is rear-view camera ready.



**Pioneer AVH-3400NEX**  
**>\$549** [www.pioneerelectronics.com](http://www.pioneerelectronics.com)  
Based around a 7in color touchscreen, this single-DIN receiver features CarPlay, with connection to iPhone available via the built-in USB cable. It also has Bluetooth and rear camera support.



**Kenwood DMX9707S**  
**>\$799.99**  
[www.kenwood.com](http://www.kenwood.com)  
Designed for wireless and wired use, this receiver has a 7in color touchscreen, Bluetooth, High-Res Audio support, dual USB ports, four camera inputs, and a 13-band graphic equalizer.



**Alpine iLX-F511**  
**>\$1,399.95**  
[www.alpine-usa.com](http://www.alpine-usa.com)  
Single-DIN though this receiver may be, it boasts an eye-opening 11in touchscreen. It also has CarPlay (wired or wireless), Bluetooth, High-Res Audio support, a 13-band EQ, two camera inputs, and two USB ports.



**JVC KW-M785BW**  
**>\$499.99**  
[www.us.jvc.com](http://www.us.jvc.com)  
Available with wireless and wired CarPlay, this double-DIN unit includes a 6.8in color touchscreen, Bluetooth, and a rear view camera input. It also has a 4x 50W amplifier built in.



# How do I use CarPlay?

It's easy to get started – let us be your guide

Apple has designed the interface to be as recognizable and user-friendly as possible.

**T**HERE ARE TWO main ways to connect an iPhone equipped with CarPlay to your car's infotainment system. The first is by plugging in your iPhone via your car's built-in USB port using a USB to Lightning cable; the second is to do so wirelessly, usually via Bluetooth. Once that's done (getting connected varies from manufacturer to manufacturer), you simply head to Settings > General > CarPlay on your iPhone, choose the name of your car, then flick the CarPlay switch to On. On the same screen, the Enhanced Integration can help your iPhone

determine which apps that you have installed are also compatible with CarPlay. It will still work perfectly without it, although you may not be able to access all the apps you might expect.

### HEY SIRI

The next steps also depend on which CarPlay features are supported on your car. On some, you'll be able to use your car's infotainment controls to navigate the interface, open apps and access individual features within apps, while others are just limited to, say, adjusting the volume level during playback or to

invoking Siri by saying "Hey Siri". For the most part you'll be using the touch-based control on your in-car display or asking Siri to do things for you – this can include tasks like reading out or dictating messages. You can also, of course, ask Siri to play content from the Music or Podcasts apps (and third-party apps such as Spotify or Overcast). You can ask Siri to add or confirm Calendar events and ask it to get Maps to direct you to the destination. If you're running low on fuel or power, you can ask Siri to direct you to the nearest gas station or EV charging point.

## HOW TO Make the most of CarPlay



### 1 Welcome to CarPlay

With your iPhone connected to your car's CarPlay-compatible media/navigation system, you'll see this Home Screen, which features familiar iPhone apps such as Apple Music, Messages, Podcasts, Calendar, Maps, and Settings.



### 2 More app choices

Just as on iPhone, CarPlay can have multiple Home Screens. Swipe right or left on the CarPlay interface to switch between them. Here you can see a Home Screen showing the available third-party apps installed on iPhone.



### 3 Change settings

To change the behavior of CarPlay, open Settings. One of your first steps should be to go to Settings > Focus and set Activate With CarPlay to On. This ensures most alerts are silenced, while others, such as phone calls, get through.



**4 Choose background**  
To change the default appearance, head to Wallpaper and select one of the options there. There are 11 wallpapers to choose from in both Light mode and Dark mode. Tap to select one you like, tap Set or tap Cancel to choose another.



**5 The Dark side**  
By default, CarPlay's menus should automatically switch between Dark and Light modes depending on the time of day (e.g. sunrise/sunset); to switch them manually, flick the Appearance > Always Dark switch On or Off.



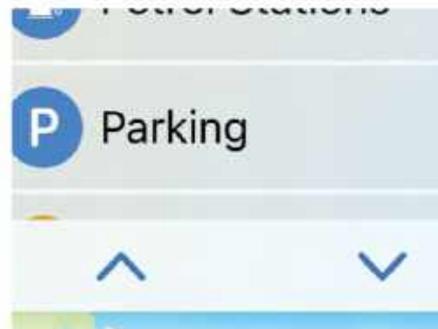
**6 Rearrange your apps**  
CarPlay will display compatible apps installed on your iPhone. To change the order, go to Settings > CarPlay > My Car > [car name] > Customise on iPhone. Press and hold the three-line icon to the right of an app to drag it to its new position.



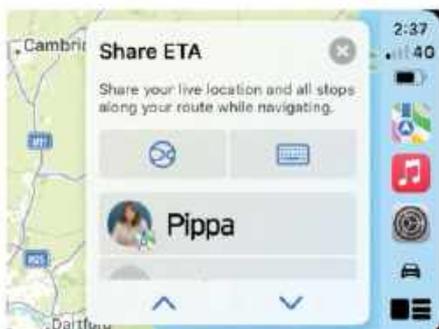
**7 Remove a CarPlay app**  
In the same menu, tapping the "-" icon to the left of an app will remove it from the CarPlay interface, but without deleting the app from your iPhone. To add an app to CarPlay, scroll down to the More apps section then tap "+".



**8 Find your way**  
The Maps app works in a similar way to the one on iPhone. You can choose from a list of recent destinations, favorite locations and new places. While some international destinations are included, intercontinental ones are not.



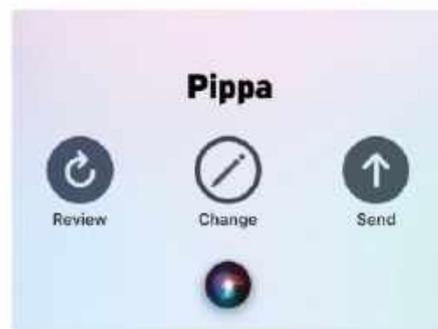
**9 Add a stop**  
Just as with Maps on iPhone, you can add multiple stops en route, including for common Points of Interest (POI) such as Gas Stations, Restaurants and Supermarkets, enabling you to plan your journey as you see fit.



**10 Send an ETA**  
You can also tell friends or family when you're expecting to arrive. To do that, choose Share ETA, then select the name of the person you wish to tell. If they own an Apple device, they'll be able to see where you are as you travel.



**11 Stay entertained**  
With CarPlay, you'll never be short of something to listen to. In Music, you can choose from curated playlists (including driving-focused ones), as well as tracks from your own Music library, whether that's on iPhone or in iCloud.



**12 Make use of Siri**  
Apple's assistant is on hand to help you choose where to go, what to play and who to stay in touch with. Siri can help you send messages and read out those sent to you. It can also help you make and take calls hands-free.



# What next for CarPlay?

How the next generation of CarPlay hints at an Apple Car future

**A**T APPLE'S WORLDWIDE Developers Conference in June 2022, Apple unveiled its plans for the future of CarPlay — and it looks incredible. While up until now CarPlay has been limited largely to a car's in-dash display, its reach could soon extend even further, taking in any and all displays available in the car, including the instrument cluster.

The aim is to create more of a unified and customizable in-car experience that'll be better than the mishmash of interfaces and usability options that car makers offer now — and car



The aim is to make CarPlay a unified experience, and many car companies are on board with Apple's plans.

makers seem to agree. Apple already has Audi, Ford, Honda, Jaguar, Land Rover, Mercedes-Benz, Nissan, Polestar, Porsche, Renault and Volvo on board, with others expected to

join. This means that not only will next-generation CarPlay be able to offer up things like Maps and Music, but will also be able to serve up your car's speed and mileage readings, fuel

## 10 best CarPlay apps



**Apple Books**  
> Free (IAPs)

[www.apple.com](http://www.apple.com)  
When used with CarPlay, Apple Books switches to audiobook-only mode (which makes sense), enabling you to listen to any audiobooks you've purchased and downloaded to your iPhone or have available in iCloud.



**Apple News**  
> Free (IAPs)

[www.apple.com](http://www.apple.com)  
Apple's News app enables you to keep abreast of the news by reading out the latest headlines and stories while you're on the go. You will need to be an Apple News+ subscriber (currently \$9.99/month) for full stories.



**Amazon Music**  
> Free (IAPs)

<https://amzn.to/3lgFDSD>  
If you're an Amazon Music subscriber, be sure to download the Amazon Music app to your iPhone. It works brilliantly in CarPlay. Just remember to sign in with your Amazon ID on your iPhone first.



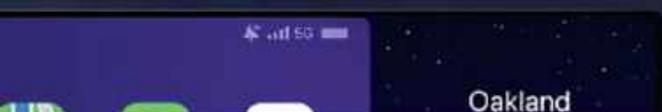
**Audible**  
> Free (IAPs)

[www.audible.com](http://www.audible.com)  
Another great source of audiobooks to listen to while using CarPlay. Audible is free to download to your iPhone, but you'll need to pay the \$7.95/month sub to carry on listening after the free 30-day trial ends.



**Overcast**  
> Free (IAPs)

<https://overcast.fm>  
If you're looking for an alternative to the Podcasts app, this should be your first stop. It's packed with thousands of podcasts and plays beautifully with Apple CarPlay, thanks to its easy-to-use interface.



## >>> What about Tesla?

While most car makers have signed up for CarPlay there's one major player who hasn't, and that's Tesla. Tesla (and Twitter) owner Elon Musk has had all kinds of public spats with Apple over the years, from criticizing the rumored Apple Car to trying to shame Apple into returning to Twitter, but the main reason seems to be this: Tesla simply prefers to offer its own infotainment

systems to its customers. One enterprising Polish developer, named Michał Gapiński, still managed to create a successful workaround though – in 2022, he equipped a Tesla Model S with CarPlay using a combination of Android, Linux, two Raspberry Pis, an LTE modem, a Wi-Fi access point and some cables. It's a kludge, but it works.



consumption and more. Plus, it'll also offer features such as weather reports, and even HomeKit controls via widgets – handy for opening the garage door in advance of your arrival home – while also controlling interior heating and cooling, electric windows, and heated

seats. There'll even be a new Radio app with an Apple Music-like interface that includes playback controls and artwork, all of which makes you wonder where Apple might go next.

While some of these new CarPlay features are simply applying Apple's

design sense to the electronic dashboards that are increasingly being offered in modern cars, their reach suggests that Apple's rumored Apple Car project may be finally bearing fruit – first CarPlay controls then, in time, the car itself? Watch this space...



### Spotify > Free (IAPs)

<https://spotify.com>  
Spotify may have a bit of a love/hate relationship with Apple, but its streaming service is a great alternative to Apple Music, with 100 million tracks and five million podcasts to choose from. It's easy to use too.



### Tidal > Free (IAPs)

<https://tidal.com>  
Another awesome alternative to Apple Music with both an ad-supported tier and a paid-for tier. With over 100 million songs to choose from, you'll never be short of a soundtrack for your latest road trip.



### WhatsApp Messenger > Free

[www.whatsapp.com](http://www.whatsapp.com)  
Meta's messaging app works very well with CarPlay, with Siri helpfully stepping in to both read out your messages and dictate your replies. It's a great way to stay in touch when you're on the go.



### TomTom GO > Free (IAPs)

<https://bit.ly/41ALvFZ>  
While TomTom's sat nav app costs from \$4.99/month, it also has several advantages over Apple Maps, including offline maps for those times when you can't get a mobile data signal either via your car or your iPhone.



### Waze > Free

[www.waze.com](http://www.waze.com)  
This Google-owned sat nav app is famous for its crowd-sourced real-time updates, giving you early warning of traffic jams, accidents and other nasties. It can even help you find the cheapest places to refuel.



The source for tech buying advice

[techradar.com](http://techradar.com)

**GET STARTED WITH**

# Reminders

**Never forget those  
important tasks again**

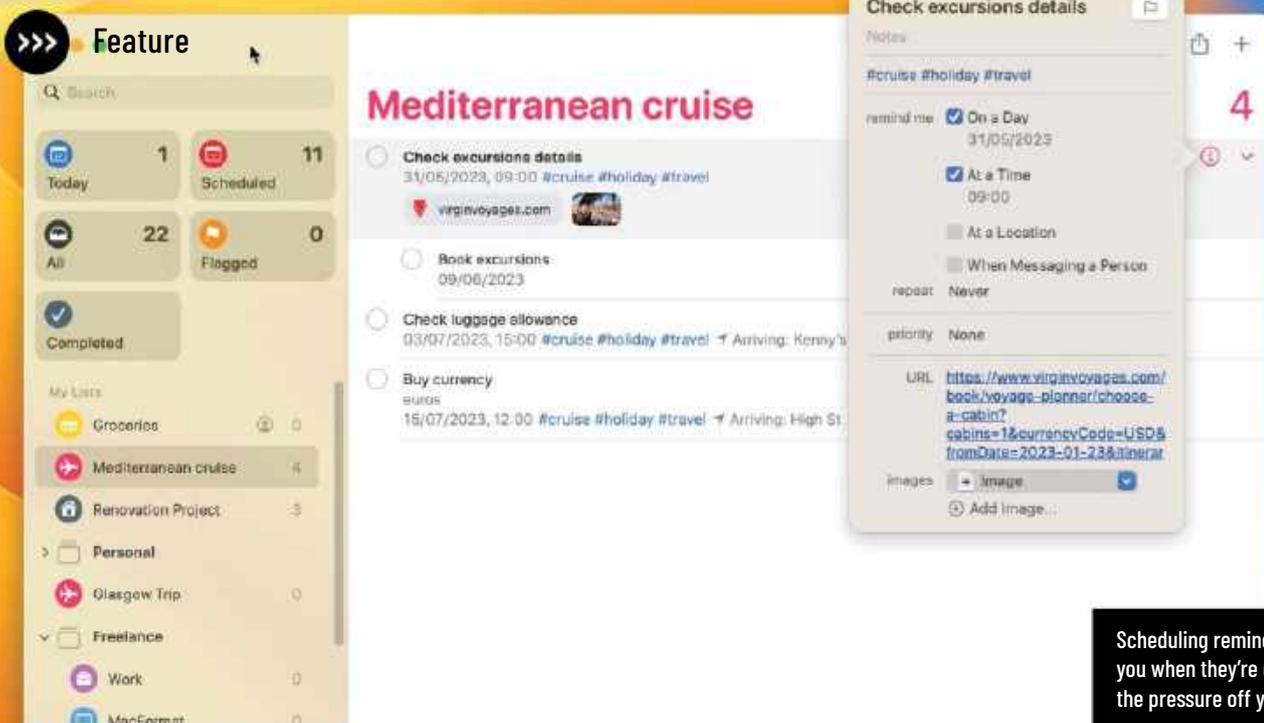
WRITTEN BY **KENNY HEMPHILL**



**APPLE'S REMINDERS APP** has come a long way over the last few years. From a fairly basic to-do list tool that allowed us to set alerts, to a fully fledged task manager that supports multiple lists, tagging, and sharing with others. Throw in the fact that it syncs with iCloud across all your devices, and there's no excuse for forgetting anything ever again. And if typing details of a task into your iPhone or Mac is too much effort, you can ask Siri to do it for you. Creating basic reminders really couldn't be easier. But Reminders goes way beyond the basics.

Let's say you want to remind yourself to buy tickets for a concert just before they go on sale. You could create the reminder, add the URL of the ticket sales site and the price of the ticket. That way, when the reminder alert is triggered, you can just tap the reminder to navigate directly to the website. Need to remember to buy milk next time you're in the supermarket? Set a geofenced reminder that's triggered the next time iOS senses your location is close to that supermarket.

As we'll demonstrate over these next few pages, it's easy to create and schedule reminders, make your own lists, or templates for lists, and store them in folders. Plus, you can build Smart Lists based on tags, collaborate on shared lists with others, and much more. ■



Scheduling reminders notifies you when they're due, taking the pressure off your memory.

# Build efficient to-do lists

Create and schedule Reminders to help manage all your important tasks

**SOME PEOPLE CREATE** lists for every little thing and meticulously record every task. Others never make a note of anything and trust their memory not to let them down. Most of us fall between those two camps and write down important tasks while entrusting the rest to memory.

However, with a tool like Apple's Reminders close at hand, there's no excuse for relying on memory. Using Reminders to "dump" everything you need to do can be very liberating, and reduce your stress levels.

Here we'll show you how to create a basic reminder, schedule it, add it to a list, and set notifications for when it's

time to complete the task. We refer to the quick actions menu in some steps — this lives above the keyboard on iOS and appears below a reminder when you click it on the Mac. If you don't have your Mac, iPhone or iPad on hand, you can create reminders on Apple Watch or by asking Siri via a HomePod or AirPods. ■

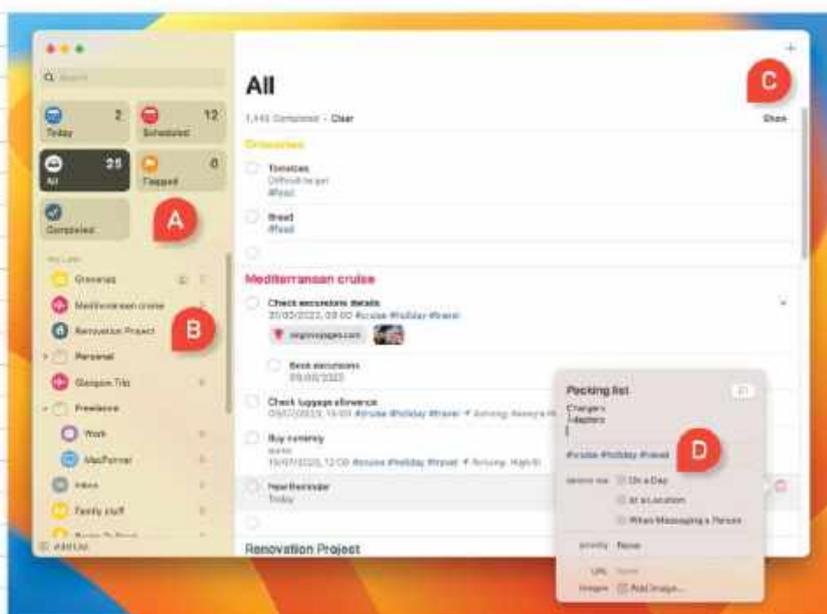
## QUICK LOOK The Reminders interface

### TASK ORDER

The main screen handily categorizes tasks so you can quickly access those due Today, or those you've scheduled or flagged.

### CREATE LISTS

You can create your own lists to organize tasks, share the lists with others, and group them in folders.



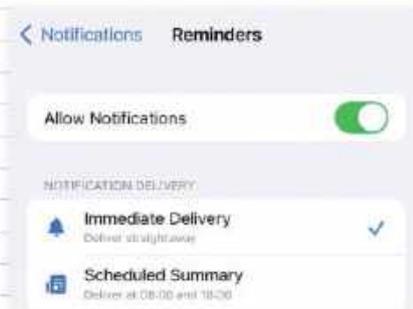
### ADD A REMINDER

To add a Reminder, you can either click the "+" icon on the main screen, or select a list and then choose the New Reminder option.

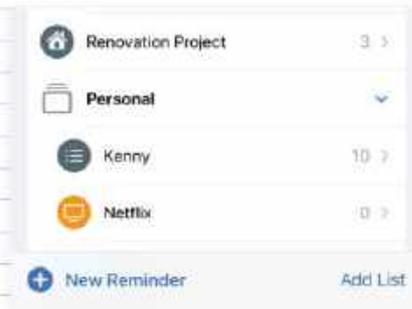
### INCLUDE TAGS

Adding tags to reminders allows you to create a Smart List and filter tasks by their tags.

## HOW TO Create and schedule reminders



**1 Set notifications**  
Notifications are important for Reminders because they govern how you are, well, reminded. Go to Settings > Reminders > Notifications and choose from the options. On Mac, it's System Settings > Notifications > Reminders.



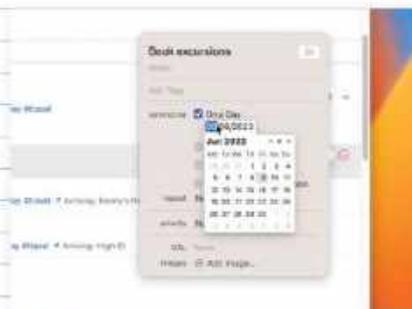
**2 Create a reminder (iOS)**  
Tap Reminders, then New Reminder. Give it a title and add any notes. Tap List and choose a list to add the reminder to it. Tap Add. You can also tap a list in the main screen, then New Reminder.



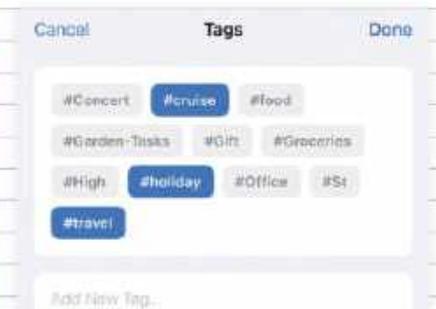
**3 Create a reminder (Mac)**  
Launch the Reminders app. Click the "+" in the top-right corner of the window. Type a title and add notes. You can drag the reminder over a list in the sidebar then drop it onto it.



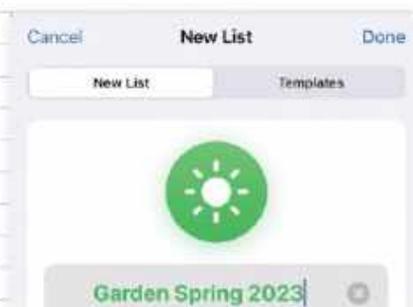
**4 Set the date (iOS)**  
Tap the reminder, tap the calendar icon above the keyboard, then tap Date & Time. Navigate to the date and tap it, then set the Time switch to on and use the rollers to set a time. You can also set date and time by tapping "i".



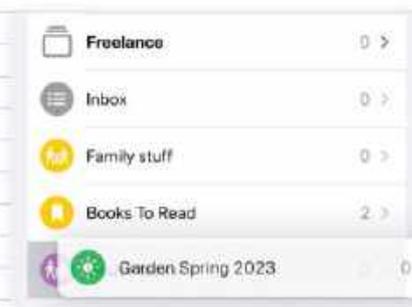
**5 Set the date (Mac)**  
Click on the reminder and click the "i". If you created it in Today, it will already have On a Day checked. If not, check it. Check "At a Time". Click on the date and time and set values for each. Click the "i" to finish.



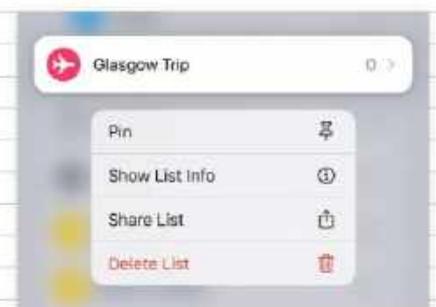
**6 Add tags**  
Tap or click on the reminder, then the "i". On iOS, tap Tags and type a tag name in Add New Tag. On Mac, click on Add Tags and type one. Once you've created a tag, you can choose it from the quick actions menu.



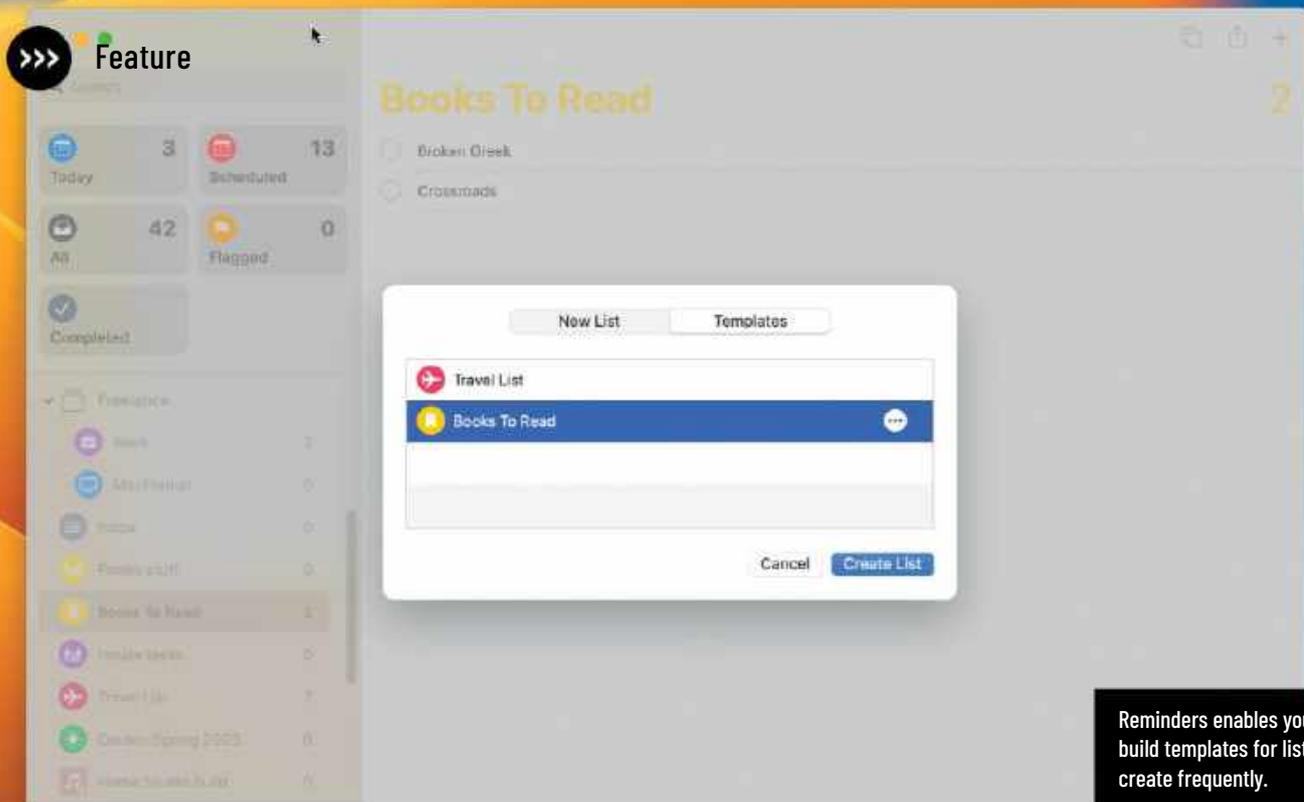
**7 Create a list**  
On iOS, on the main screen, tap Add List. Type a name and then choose a color. Tap an icon and then tap Done. On the Mac, click Add List or File > New List. Type a name, choose a color, and click the icon to choose one.



**8 Group lists**  
To group lists in a folder in iOS, tap and hold on a list, drag it over one you want to group it with, and drop it onto it. Type a name for the group. Repeat for other lists you want to add. On Mac, drag and drop instead of tap.



**9 Manage lists**  
To delete a list on iOS, tap and hold on it, then choose Delete List. On the Mac, Ctrl-click on it and choose Delete. To pin a list to the top, tap and hold or Ctrl-click on it and choose Pin on iOS or Pin List on Mac.



# Do more with Reminders

Now that we've mastered the basics, it's time to go deeper

 **YOU NOW KNOW** how to create and schedule reminders, tag them, and create and manage lists, so it's time to make them really useful. For example, by using the Smart Lists feature, you can create lists that include reminders based on tags, meaning you don't have to manually assign them to a list.

You can also collaborate on lists. For example, if you have a groceries list, you can share it with other members of your household so you can all add to it or check off items as you buy them. Items on lists can be geotagged so you are alerted when you arrive or leave a specified location. And you can make and save templates for lists that you

create regularly, such as a packing list for trips.

You can add URLs, images, and text notes. And, by using Share sheets, you can add reminders from an app. This way, you can remind yourself to complete a task by visiting a website and already have the URL and preview of the page in the reminder. ■

## HOW TO Make a Smart List

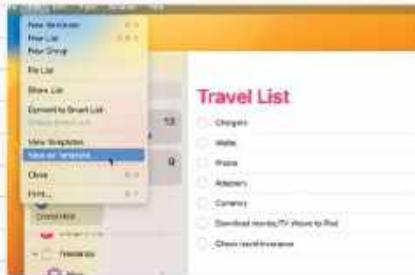


**1 Create the list**  
We're making a list for a home renovation project. Create a list as in step 7 on p63. Before finishing, select "Make into Smart List". To choose tags to use as filters, tap Tags, or click in the box on Mac, and choose the tags.

**2 More conditions**  
We want to exclude a list that has general chores in it. Tap Lists, then Exclude or, on Mac, click "+" then choose Lists and Exclude Selected List. Choose the list. To set a date range, choose Date > Specified Range.

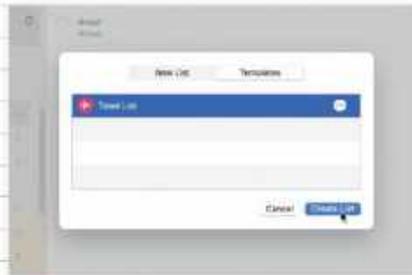
**3 Share with others**  
You can't share a Smart List, but you can share regular lists. Tap or click on the Share icon and choose a method by which to share. Fill in the details of the person you want to share with and click or tap Send to invite them.

## HOW TO Create and use templates



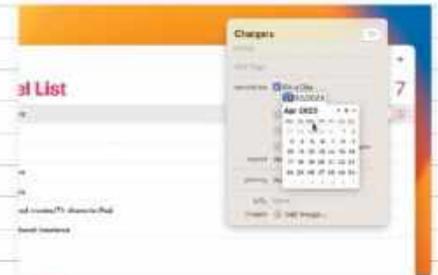
### 1 Build a template

To create a template, you need to use an existing list. We're using a list created for a trip. Tap or click on the list you want to use. On Mac, click File then "Save as Template". On iOS, tap More ("...") and "Save as Template".



### 2 Finish creating

Type a name for your template and click Create on Mac or tap Save on iOS. To use a template, click or tap Add List, then choose Templates and click or tap on the template and name the list. Tap Create, or click Create List.



### 3 Edit the list

Lists created from templates include tasks from the original lists and their original due dates and times. To change these, tap or click the "i" next to the task and assign new values for date and time. Next, add new reminders.

## HOW TO Set up content-rich reminders



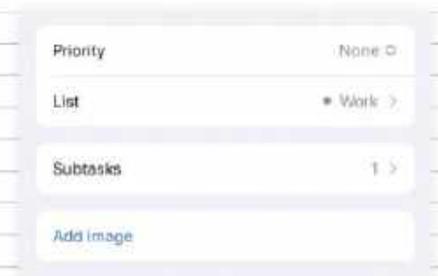
### 1 Create from web page

Navigate to the web page in Safari. Click or tap on the Share icon and choose Reminders. On Mac, click "i" to set the date and time and choose a list from the menu. On iOS, tap Details and choose.



### 2 Add an image

Select a reminder and tap the "i". On Mac, click Add Image. On iOS, scroll to the bottom of the options and tap Add Image. Choose Photos to add from your Library. On iPhone, you can also take a photo or scan a document.



### 3 Split into subtasks

You can break tasks down into subtasks. On iOS, tap a reminder and tap the "i", then tap Subtasks and Add Reminder. On Mac, create a new task, then select it and either press `Cmd+]` or drag it on top of the parent task.



## > SIRI AND REMINDERS

### Get even more appointment assistance from Siri

You can use Siri in conjunction with Reminders in several ways. The most straightforward is to say "Hey, Siri" within range of an Apple device that can "hear" you, such as an iPhone, HomePod, AirPods, or Apple Watch. You can then ask it to set a reminder for a specific time and date.

However, you can also use Siri's artificial intelligence and ask it to remind you of a task you created while you're having a conversation with someone in Messages. And Reminders has several actions for Shortcuts, as well as a handful of pre-created shortcuts in the Gallery.



# Affinity Publisher 2 for iPad

Pro publishing in a portable package

**\$19.99 (standalone), \$169.99 (universal license)**

**From** <https://affinity.serif.com>

**Needs** iPadOS 15 or later, Apple silicon recommended



**A PRO-GRADE DTP** app on the iPad? It's true. The release of the second version of the Affinity suite of creative apps has seen Serif take a step that it chose not to with the previous iteration, which saw the Designer vector illustration app and the Photo image-editing app move to touchscreen town – but not Publisher.

Publisher 2, therefore, has something to prove. Happily, it largely manages to show that having a full creative suite on an iPad is a good

idea, and Apple's introduction of Stage Manager into iPadOS couldn't have come at a better time.

While it's probably still best to work with the app using a mouse, keyboard and external monitor, the Apple Pencil support means it's possible to use Publisher as if your iPad was a graphics tablet, as plenty of graphic designers do with desktop apps like InDesign.

## **PUBLISH ON THE GO**

If you're used to Adobe's app, learning the new interface is key to gaining proficiency, but may



One main "... " menu contains many common commands, saving hunting.



Export options are vast, catering for print-ready PDFs, PSD files, and web formats.



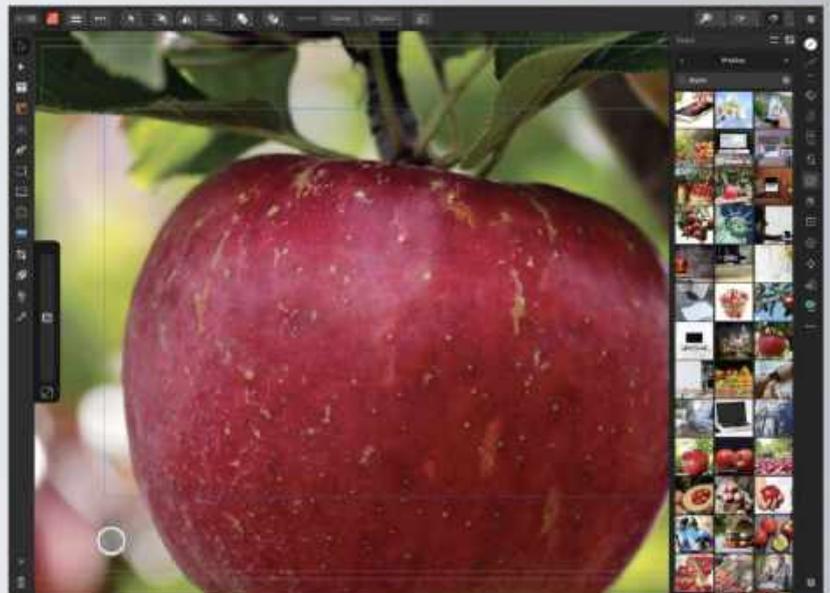
Prepare to delve into the submenus for certain tools.

take some time. The interface is nicely minimal to make the most of the limited screen space, at the expense of being able to find things if you're not already aware of their location, and which can be completely removed at any time for a fullscreen view of your work. Tooltips and generous help files, as well as online tutorials, go a long way to easing the transition.

Adobe's IDML files can be imported, and PSD files can be placed (including editable text), as can WebP, JPEG XL, and even raw images which can then be edited. And of course there's full PDF export too. Save your documents to the cloud (there's Dropbox integration in the app, with Files for everything else) and you can work on them on Macs or even Windows PCs seamlessly.

And while Serif embraces Adobe's file formats, it rejects its pricing structure. There's no subscription, and buying the Universal License gets you all three apps in the suite on both desktop and iPad. With all three installed on your iPad, StudioLink works in exactly the same way as it does in the desktop, changing the toolset to directly edit raster or vector images in the layout.

Publisher has some well-thought out features that will appeal to anyone laying out publications from a leaflet to a full magazine. Our favorite is that every object is on its own layer, making the vertical stacking of text and images easier. The iPad version also gets a Command Controller, a gray disc that looks rather like the on-screen joystick from a game, but which provides easily accessible options for tools, replicating the



Free stock images from Pixabay and Pexels can be searched from the Stock panel, ready to be added to your layout.

modifiers on a keyboard. You can use it to constrain proportions, toggle snapping, and lots of other useful things.

Affinity Publisher 2 is an ambitious app, but succeeds in what it sets out to do, and even goes some way to justifying the iPad as a serious work device. It may take some time to become familiar with its systems and methods of interaction, however, if you'd rather use an iPad than a MacBook. **IAN EVENDEN**

**THE BOTTOM LINE**

An auspicious debut for Affinity Publisher on iPad.

- Excellent performance on iPad Pro
- Well-thought out app features
- Comprehensive help files
- Interface will take some learning

**AWESOME** ██████████



Logitech's MX Keys Mini looks and performs just as well as the Magic Keyboard.

# Logitech MX Keys Mini for Mac

## A great match for your Apple-oriented desk space

**\$99.99** From [www.logitech.com](http://www.logitech.com)

**Features** Bluetooth, easy-switch keys, hand proximity sensors, 5.19 x 11.65 x 0.82in, 17.86 oz  
**Needs** macOS 10.15 or later, Bluetooth Low Energy enabled device

**WANT A WIRELESS** alternative to Apple's Magic Keyboard? Then consider the MX Keys Mini for Mac. It combines an Apple-friendly aesthetic with all the shortcuts and key legends (Cmd, Opt, et al) a Mac user would need, with a built-in battery for Bluetooth LE connectivity and multi-device pairing. Its white keys on a silver base are a great match for Apple's products. It's compact and solidly built too, with rubberized strips on its underside to stop it slipping on your desk.

Logitech's "Perfect Stroke" keys are close to those in the latest MacBooks or the Magic Keyboard line — low profile and easy to actuate. With a satisfyingly tactile feedback they feature a slightly concave surface for comfortable and accurate touch-typing. The keys also feature a "Made for Mac" layout, which is neat.

It has an ace that Apple's offerings can't match — smart backlighting. A proximity sensor adjusts the backlight when your hands aren't near, to save battery life. Logitech

promises ten days with the backlight on and up to five months with it off. That seems low, but thankfully charging is easy — a USB-C port is easily accessible in the top corner.

An entire row of function keys sits along the top, with useful presets. The keyboard supports up to three paired Bluetooth devices (including iPhone/iPad/Mac) at a time, and the first three keys let you quickly switch between them. Other keys allow you to toggle backlight control, dictation, volume, and more.

With so many positives, it's easy to overlook the negatives, but they're there. For one, the angle of the keyboard can't be adjusted, which might not suit those wanting to be able to adjust the ergonomics. And you can't use the keyboard wired over USB-C either (it's only for charging). It's also the same price as the Magic Keyboard; Apple silicon fans may prefer the \$149 version with the convenience of Touch ID. If you're looking for cheaper options, Logitech's K380 keyboard offers similar sizing and Bluetooth functionality. **GERALD LYNCH**

### THE BOTTOM LINE

A brilliant Magic Keyboard alternative, though it's as pricey.

- Exquisite Apple style
- Very comfortable
- Compact
- No wired option

**EXCELLENT** ■■■■■

# A Little to the Left

Punctilious puzzles for the meticulous gamer

**\$14.99** From [www.maxinferno.com](http://www.maxinferno.com)

**Needs** macOS 10.13 or later

**FOR SOME PEOPLE**, keeping things neat and orderly is its own form of satisfaction. If you enjoy the challenge of ensuring everything exists in its proper place (while dealing with a meddlesome cat), *A Little to the Left* could be your kind of game.

Taken at face value, there are a lot of similarities between *A Little to the Left* and another Mac game, *Unpacking*. Both task you with organizing household scenes and objects, and both do it wordlessly without offering much in the way of assistance.

But if *Unpacking* takes a higher view, telling a story that unfolds over many years through the objects you are sorting and placing onto shelves, *A Little to the Left* is focused much more on the minutiae. Each puzzle consists of a set of household objects — a set of pencils, some pasta shapes, various bottles of home cleaning products — that you have to drag and drop into the right order.

Things start out easy, with you simply needing to line up books in height order or arrange sticky notes to make a joined-up shape. As you progress, the puzzles get trickier, and there are plenty of satisfying “ah ha!” moments to be had. Every now and then, though, a pesky cat will mess up your puzzle solutions with a grasping paw or a swish of its bushy tail.



Occasionally, the resident cat will interfere by swiping at your completed puzzle, sending it into disarray.



## TIDY HOUSE, TIDY MIND

*A Little to the Left*'s lack of exposition is sometimes an issue, and we stumbled on a few puzzles where it was not at all clear what was being asked of us. If you're stuck, though, there is a hint page that's there to help. You can use an eraser to uncover the solution on a page, which allows you to reveal just as much as you need without giving the game away.

We admired *Unpacking* for its ability to immerse you in the world of an unseen protagonist purely through examining the objects in their life. *A Little to the Left* doesn't offer that kind of joyful exploration, but the bite-sized nature of its puzzles lends itself well to short bursts of problem-solving.

We enjoyed the colorful, hand-drawn nature of each puzzle, while the audio design — both the quirky music and the realistic sound effects — was excellent. While the game's lack of narrative means *A Little to the Left* never quite hits the heights of *Unpacking*, if you liked the latter, the former will scratch a similar itch.

**ALEX BLAKE**

Each puzzle tasks you with arranging items into correct (and pleasing) locations.

## THE BOTTOM LINE

A relaxing puzzler that's easy to dip in and out of.

- 🎮 Creative puzzles
- 🎧 Lovely visuals and audio
- 📖 We'd love some story
- 📖 A touch more exposition would be welcome

**GREAT** ■ ■ ■ ■ ■ ■ ■ ■ ■ ■



On the back is a Powerfoyle solar panel that keeps the Phoenix's charging case juiced up.

# Urbanista Phoenix

## These headphones will never need charging

**\$149** From [www.urbanista.com](http://www.urbanista.com)

**Features** Light-powered charging case, 34-hour reserve battery, hybrid active noise canceling, ear detection, transparency mode, Bluetooth 5.2, IPX4 water resistance, eight-hour playtime

**IN ISSUE 193**, we tested and reviewed Urbanista's solar-powered Los Angeles headphones. Now, the company has transplanted its light-fueling tech into the more compact Phoenix earphones.

In the Los Angeles, a solar-charging strip was integrated into the headband, but of course it works differently in the Phoenix earphones. Each earbud is too small to fit any kind of solar panel, so instead a roughly two-inch-squared light cell sits on one side of the charging case, which in turn juices up the earbuds. It works with artificial light too, not just sunlight.

The result is a case that charges the buds forever, cable-free. The earphones get around seven and a half hours of juice themselves, but the case will never run out of power providing it's exposed to light. The box also has a 34-hour reserve battery to pull you through darker times. Note that since there's no solar panel on the earbuds, they won't charge up as you use them.

Audio is well-balanced and the Phoenix capably handle a range of genres. Highs and mids are clear and detailed, although lows can get a little muddy on complex, layered arrangements. There's active noise cancellation (ANC), but unfortunately we struggled to differentiate it from the default mode, which is disappointing. The touch controls, meanwhile, are extremely temperamental — we struggled to get the rewind gesture to work, for instance.

The earbuds are stylish and look good when worn. When you take them out, your audio pauses and resumes when you put them back (although it can restart a little early). The case is bulky and, while not heavy, it's still about twice the size of an average charging box.

The battery life is the main pull, but the Urbanista Phoenix is no one-trick pony. The pleasing audio and good looks mean you're not simply trading longevity for everything else. Hopefully the next version can iron out the kinks. **ALEX BLAKE**

### THE BOTTOM LINE

Banish charging cables forever with the power of light.

- Impressive battery life
- Enjoyable audio
- Bulky case
- Fiddly gesture controls

**GOOD** ■■■■ ■

# Proton Drive

## Private encrypted storage

**Free (1GB); \$59.99/year (200GB); \$149.99/year (500GB + Proton Mail, Calendar and VPN) From** <https://proton.me>

**Needs** iOS/iPadOS 15.0 or later



**IF THE IDEA** of locking your private data away in a Swiss vault is attractive, then Proton Drive might be the perfect solution. It's a new encrypted cloud storage service from the Swiss firm responsible for Proton Mail, and sits alongside that, Proton VPN and Proton Calendar, in a suite aimed at providing robust privacy protection.

At its heart, it's an app to encrypt files on your device and upload them to Proton's servers for safe keeping. Because the password and encryption are kept on your device, Proton can't access any of the data you store there, only you can. Or, rather, anyone with your username and password can.

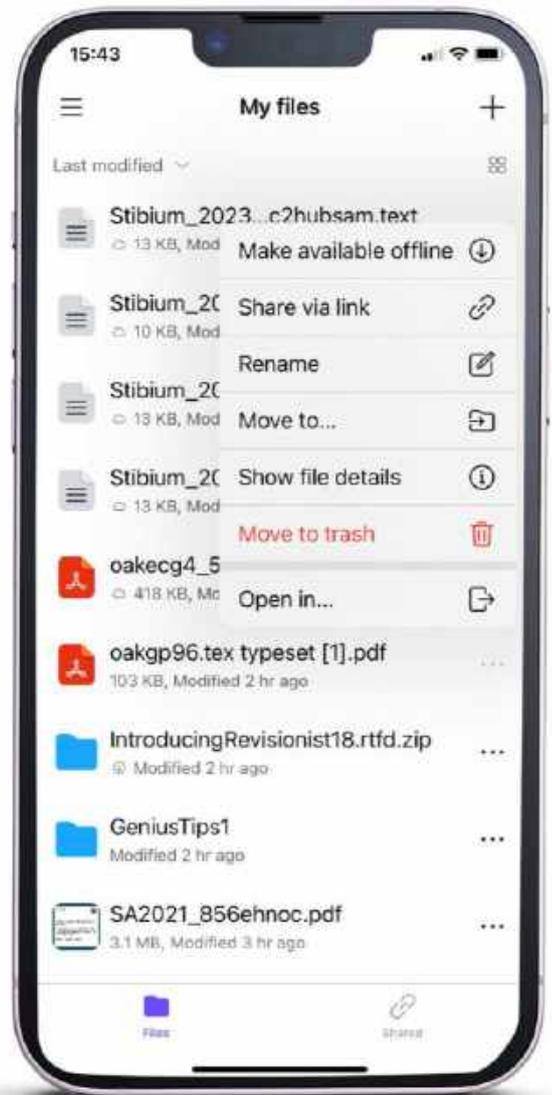
The Proton Drive app gives you access to all the encrypted files stored in your Swiss vault, but is only weakly integrated into iOS, and doesn't appear as a Share action. Saving from another app straight into your vault isn't allowed if you've enabled Face ID for accessing the app. This leaves you saving each document locally or into iCloud before using Proton Drive to encrypt and upload it.

Some documents cause problems: RTFD is really a folder, and has to be zipped by

Proton Drive before encryption and upload. Accessing it from within your vault is fraught, as it doesn't seem to reconstitute readily. As documents are recognized by their MIME types, some may not turn into the expected iOS type.

Neither is the iOS app complete. It does let you enable local Face ID or authentication by PIN, but to protect your account using 2FA or an authenticator app, you have to resort to its web interface, where there's no support for passkeys yet. While Proton keeps a full log of all access to your vault, that too is only accessible in a web browser, not in the Proton Drive app. Unless you access your vault through its web interface, you'd never learn of any third-party access to your sensitive files. None of this is helped by the almost complete lack of documentation and tutorials.

Proton has high ideals and strong community support for what looks like an excellent independent service. At present, though, its Proton Drive app is little more than a proof of concept, and badly needs tighter integration and support for account security. It's not yet a serious contender against iCloud. **HOWARD OAKLEY**



The app can open some files directly, but not others like RTFD.

### THE BOTTOM LINE

While its protection looks promising, it needs tighter integration before it might challenge iCloud.

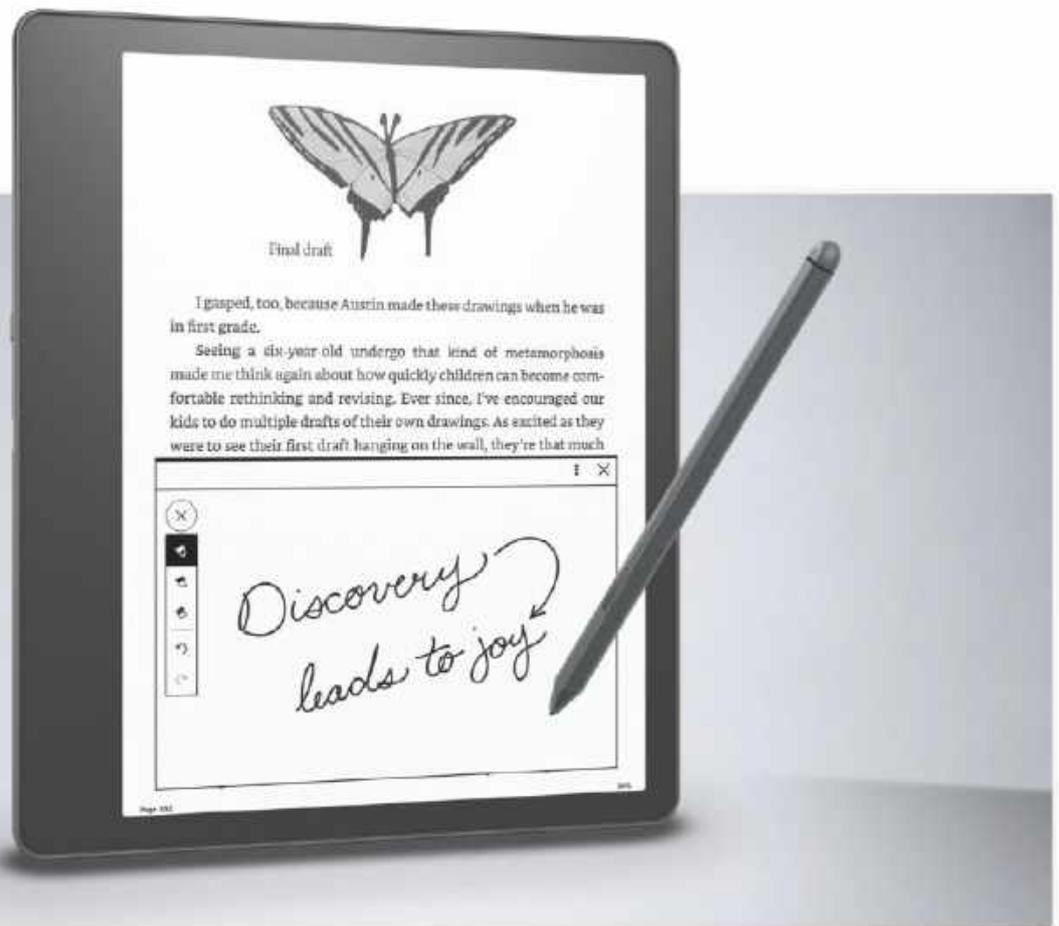
➤ Ambitious intentions

➤ Excellent service protection

➤ Lack of integration

➤ Key options web-only

**OKAY** ■■■■■



The Scribe's battery life is classic Kindle – it just seems to go on forever (well, weeks anyway).

# Kindle Scribe

More of a sticky note than a scribe

From **\$339.99 (16GB, Basic Pen)** From <https://amzn.to/3lgFSDS>

**Features** 10.2-inch, 300 ppi, auto-adjusting front light, 16/32/64GB, USB-C, magnetic pen



An optional folio case can keep the pen in place when inserting the Scribe into a backpack.

## THE BOTTOM LINE

A brilliant big-screen Kindle, but there aren't many writing features here.

- ▶ Big & clear display
- ▶ Excellent battery life
- ▶ Few writing features for academics
- ▶ Expensive when bought as an e-reader

**GOOD** ■■■■■

**THE KINDLE SCRIBE** is a large-screen Kindle with a pen included, allowing you to write on it, though it's basic in that respect – more so than competing tablets like the reMarkable 2. A Premium Pen is available (\$30 extra), offering an eraser and a shortcut button, which are useful additions if you need them.

If you want to read books on a large-screen Kindle, the Scribe is an easy ereader to recommend. The huge pixel density means everything is super sharp and glorious on-screen. However, for journaling, note taking, and other writing tasks, the Scribe is a letdown. For students and academics, the Scribe only allows you to write notes as sticky notes appended to a book. You cannot actually write on the book page, in the margins, for instance. For journaling and freewriting, the Scribe offers few template options, and none that work well with popular journal methods. If you use bullet journaling there are basic dots and lined pages, but nothing as organized or creative as the templates on the reMarkable 2.

Another disappointment is that there's no way to convert handwriting to typography. This would be a great way to search through all of the sticky notes

taken on a book, or a better way to send a written document via email.

That said, the writing experience on the Scribe with its Basic Pen is the best we've experienced to date. It is extremely smooth, and it's hard to convey how good it really is to write on that screen. But if you were hoping to doodle and draw, the Kindle Scribe is not interested. You get a pen, a highlighter, and an eraser – that's it.

Amazon makes it easy to set up the Kindle Scribe and get all of your books and documents on and off the device. It's easy to connect to a Wi-Fi network, and the Kindle doesn't need a second device for setup. An iPhone with the Kindle app helps speed the process along, but it isn't required.

Some folks may want an LTE connection at least for downloading books or emailing simple black-and-white documents on the move. Amazon sells a deluxe version of the Kindle Oasis with 4G LTE, so it's a little strange to see the Scribe miss out... although we suspect the price alone for that privilege may be prohibitive for most potential users.

We wish the pen added more value, but this is still a brilliant ereader, with a great screen and excellent battery life. **PHILIP BERNE**



# FiiO BTR7

Versatile and portable DAC/amp

**\$199.99** From [www.fiiio.com](http://www.fiiio.com)

**Features** 1.3-inch IPS color display, 9 hour battery life, Bluetooth with AAC, aptX HD, USB-C, 3.5mm and 4.4mm connectors, 0.57in x 1.56in x 3.29in, 2.4oz

**THERE ARE SEVERAL** portable DACs now available that are primarily designed for use with smartphones. FiiO's BTR7 isn't as compact as some of its rivals, but its impressive range of features mean that it works well with a much wider selection of devices. We tested the standard version of the BTR7, which has a USB-C interface for use with Macs, PCs, and the latest iPads, but there's also an "Apple Deluxe" edition available for \$210 that includes a Lightning adaptor for the iPhone and older iPads.

Unlike most portable DACs, the BTR7 has a rechargeable battery, which means it doesn't drain the battery of your smartphone or tablet while you're using it. FiiO quotes a battery life of nine hours, although we got just over seven hours during our tests — but that's still enough for day-to-day use when traveling.

There are both 3.5mm and 4.4mm connectors for wired headphones, and the BTR7 includes two DAC chips and two amplifier modules that allow it to drive even

high-end hi-fi headphones. It supports lossless and high-res audio formats up to 32-bit/384kHz and, unlike most portable DACs, the BTR7 also supports Bluetooth too.

When we connected our Yamaha L700 headphones to the BTR7 via the 3.5mm jack, we were really impressed by the deep, firm sound of the slap-bass on *The Big Sky* by Kate Bush. The track's avalanche of drums and percussion sounded great too, but the BTR7 was still able to pick out lighter details, such as the shimmering tambourine floating in the background and, of course, Kate's soaring vocals. Our only complaint is that the screen isn't touch-sensitive, and the controls for navigating through the settings can be a bit awkward at times. But, if you're an audiophile who really wants the best sound quality for their wired headphones, then the BTR7 is a versatile option. **CLIFF JOSEPH**



The BTR7 is larger than some of its portable rivals, but is loaded with useful features.

## THE BOTTOM LINE

The controls could be improved, but the BTR7 provides great sound quality and versatile connectivity features.

- ✔ Supports hi-res audio
- ✔ 3.5mm and 4.4mm connectors
- ✔ Bluetooth connectivity
- ✘ Clumsy controls

**GREAT** ■ ■ ■ ■ ■



The microphone uses a click dial system to let you control levels, routing, polar patterns and even the built-in filter.

#### THE BOTTOM LINE

A versatile and great-sounding mic and interface for podcasters, musicians, and voiceover artists.

- ▶ Clear and solid sound
- ▶ Four polar patterns
- ▶ Onboard mixing features
- ▶ An extra physical audio input would be a bonus

**EXCELLENT** ■■■■■

# IK Multimedia iRig Stream Mic Pro

Flexible recording for Mac and iOS

**\$169.99** From [www.ikmultimedia.com](http://www.ikmultimedia.com)

**Features** 24-bit, 96kHz recording; stereo or four-channel operation; four polar patterns; direct monitoring; dual, gold-sputtered 0.55-inch capsules; 20Hz to 20kHz frequency response

**IK MULTIMEDIA PRODUCES** a range of audio devices that straddle the worlds of music-making and podcasting, with a focus on portability. The iRig Stream Mic Pro is a microphone that doubles as an audio interface for your Mac, PC, or iOS device. Entirely self-contained and requiring no drivers, it comes with Lightning and USB-C cables and will power from your device, an optional power supply also allowing the charging of iOS devices when in use. You also get an adjustable metal desk stand and a thread adapter should you wish to mount the mic on a larger boom.

The microphone eschews IK's more traditional side-mounted buttons in favor of a clever one-dial system for controlling its various features. Your first step will be to choose the polar pattern, with four available by clicking and rotating the dial. The front-facing cardioid pattern is the most common, suitable for vocals, streaming, instrument recording and podcasting. Omnidirectional picks up in a 360-degree field, while Figure 8 picks up equally from behind and in front, good for face-to-face interviews, and finally Stereo from left and right.

Click the dial again and you can select a three-position adjustable high-pass filter, which will cut out rumble and other unwanted low frequencies. Clicking through further you can easily set headphone, streaming level,

loopback and monitor mix control levels. By default the microphone mixes down the four available channels to stereo for sending to your software, but it can also be switched into multitrack mode in which case its four channels will be sent separately, giving more options when mixing – for example to capture your vocal to one track and a stereo source like a keyboard to separate tracks.

#### PERFECT FOR PODCASTERS

The microphone's loopback mode, when activated, can take audio streamed from your device over USB and blend it in with the mic's signal before sending it back, which is handy for recording an online participant as part of a podcast for example. Despite the unit's compact size you can manage how you hear the various signals in your headphones, with direct monitoring and monitor mixing, controllable via the main dial.

This is a great all-round streaming microphone that will suit podcasters, voiceover artists and indeed those recording singing or acoustic instruments. It's versatile and easy to use and the click dial system is preferable to button-based methods. While it's nice to have the aux in and loopback features, and they are genuinely useful, it won't substitute for a fully blown multichannel audio interface, but then it is much more compact. **HOLLIN JONES**



**THE MICROPHONE'S LOOPBACK  
MODE CAN TAKE AUDIO  
STREAMED FROM YOUR DEVICE  
OVER USB AND BLEND IT IN  
WITH THE MIC'S SIGNAL  
BEFORE SENDING IT BACK**

# Best of the best

Can't find the hardware or app you're looking for in our reviews section? Then check in here – we've highlighted the best in every major category, as voted for by us

> HARDWARE				
CATEGORY	PRODUCT	WEB	PRICE	ISSUE
MESH ROUTER	ASUS ZenWiFi XT9	asus.com	\$449.99	#201
4K USB-C MONITOR	BenQ EW3280U	benq.com	\$799.99	#169
THUNDERBOLT DOCK	CalDigit Thunderbolt Station 4	caldigit.com	\$379.99	#199
KEYBOARD	NuPhy Air75 Wireless Mechanical	nuphy.com	\$109.95	#189
PORTABLE PRINTER	Epson WorkForce WF-110W	epson.com	\$299.99	#185
PORTABLE HDD	Toshiba Canvio Flex 2TB	storage.toshiba.com	\$79.99	#197
NAS DEVICE	Asustor Lockerstor 2 Gen 2 AS6702T	asustor.com	\$459	#205
WIRELESS CHARGER	Belkin BoostCharge Pro Portable	belkin.com	\$59.99	#197
DESKTOP SPEAKERS	Creative Pebble Pro	us.creative.com	\$59.99	#204
IN-EAR HEADPHONES	Beats Fit Pro	beatsbydre.com	\$199.99	#190
SECURITY CAMERA	EufyCam 2C (two-pack kit)	eufylife.com	\$239.99	#171
SMART SPEAKER	HomePod mini	apple.com	\$99	#176
OVER-EAR HEADPHONES	Sony WH-1000XM5	sony.com	\$399.99	#197
AIRPLAY SOUNDBAR	Sonos Beam	sonos.com	\$449	#187
WEBCAM	AnkerWork B600 Video Bar	ankerwork.com	\$219.99	#191
PHOTO PRINTER	Liene 4x6 photo printer	amazon.com	\$136.99	#190
PORTABLE BATTERY PACK	Anker 533	us.anker.com	\$49.99	#198
MOBILE DOCK	Kensington 8-in-1 USB-C Mobile Hub	kensington.com	\$77.55	#190
OFFICE CHAIR	Branch Verve	branchfurniture.com	\$549	#201
MOUSE	Logitech MX Master 3S	logitech.com	\$99.99	#198
ACTION CAMERA	GoPro Hero 11 Black	gopro.com	\$500	#202
SMART TV PLAYER	Roku Streaming Stick 4K	roku.com	\$49.99	#190
PORTABLE DAC	iFi Go Blu	ifi-audio.com	\$199	#189
PORTABLE SSD	Crucial X8	crucial.com	\$219.99	#203
THUNDERBOLT 4 HUB	Satechi Thunderbolt 4 Slim Hub	satechi.net	\$199.99	#205
CD/DVD DRIVE	NOLYTH External DVD Drive	amazon.com	\$39.99	#204
TRAVEL CHARGER	Mophie 3-in-1 travel charger	zagg.com	\$149.95	#202
IPHONE GAME CONTROLLER	Razer Kishi v2	razer.com	\$99.99	#203

**> iOS/iPadOS APPS**

CATEGORY	PRODUCT	WEB	PRICE	ISSUE
TO DO (PRODUCTIVITY)	 Things 3	culturedcode.com	\$9.99	#194
WRITING	 Scrivener	literatureandlatte.com	\$19.99	#138
EMAIL	 Spark	sparkmailapp.com	Free	#190
PHOTO EDITOR	 Pixelmator Photo 2	pixelmator.com	\$4.99	#193
VIDEO EDITOR	 LumaFusion 3.0	luma-touch.com	\$29.99 (IAPs)	#186
CAMERA	 Obscura 3	obscura.camera	\$9.99	#196
RSS READER	 Reeder 5	reeder.app	\$4.99	#176
<b>DESKTOP PUBLISHING</b>	 Affinity Publisher 2	affinity.serif.com	\$19.99	#206
NOTE-TAKING	 Notability 10	gingerlabs.com	\$8.99	#174
MIND-MAPPING	 MindNode 7	mindnode.com	\$14.99	#184
DOCUMENT SCANNER	 Genius Scan 6.0	thegrizzlylabs.com	Free (IAPs)	#182
CALENDAR	 Fantastical 3	flexibits.com	\$4.99/month	#198
FITNESS	 Gentler Streak	gentler.app	Free (IAPs)	#199
SHOPPING	 Grocery 3	smartgrocery.app	Free	#198
GRAPHICS	 Procreate for iPad	procreate.art	\$9.99	#196

NEW!

**> macOS APPS**

CATEGORY	PRODUCT	WEB	PRICE	ISSUE
TO DO (PRODUCTIVITY)	 Things 3	culturedcode.com	\$49.99	#194
WRITING	 Scrivener	literatureandlatte.com	\$49	#200
EMAIL	 Spark	sparkmailapp.com	Free	#190
PHOTO EDITOR	 Luminar Neo	skylum.com	\$79	#194
VIDEO EDITOR	 Wondershare Filmora	wondershare.com	\$109.99	#202
SCREEN CAPTURE	 ScreenFlow 9	telestream.net	\$129.00	#164
MUSIC CREATION	 Logic Pro	apple.com	\$199.99	#141
PASSWORD MANAGER	 Secrets	outercorner.com	\$19.99	#188
DESKTOP PUBLISHING	 Adobe InDesign	adobe.com	\$20.99/month	#162
BACKUP	 Carbon Copy Cloner	bombich.com	\$39.99	#136
VIRTUALIZATION	 Parallels Desktop 18	parallels.com	From \$99.99	#201
TIME-TRACKING	 Tyme 3	tyme-app.com	\$3.99/month	#169
NOTE-TAKING	 Agenda	agenda.com	Free	#204
AUDIO AND VIDEO CONVERTER	 Wondershare UniConverter	wondershare.com	\$49.99/year	#203
VIRTUAL PRIVATE NETWORK	 NordVPN	nordvpn.com	\$11.95/month	#186

# next month



ISSUE 207  
on sale  
**23 MAY**  
**2023**

## Power up your Mac!

Make your Mac work like new — must-try tips and tricks for a faster, leaner machine



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## Gear for the great outdoors

Essential accessories for Mac, iPhone and iPad — whether you're traveling or in the backyard

## Customize your Home Screen

Make your iPhone your own with our in-depth guide

**...and much more!**

*Contents subject to change*

### Volume 17, Issue 5

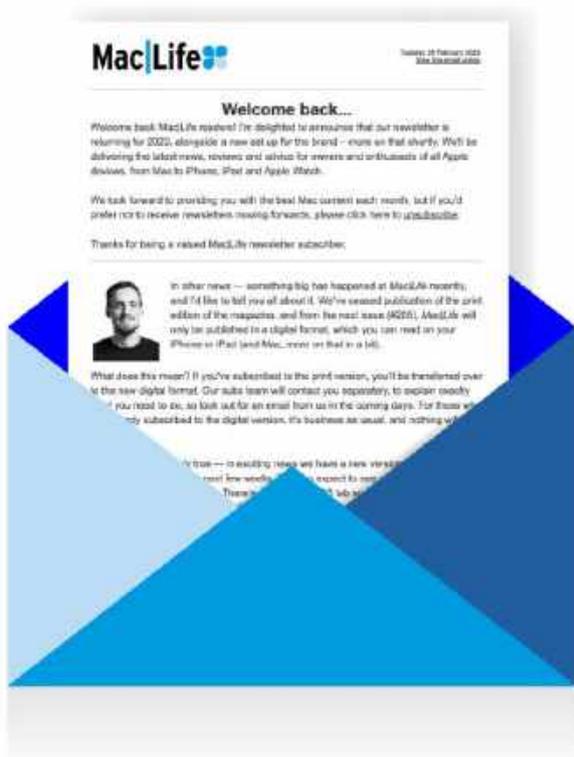
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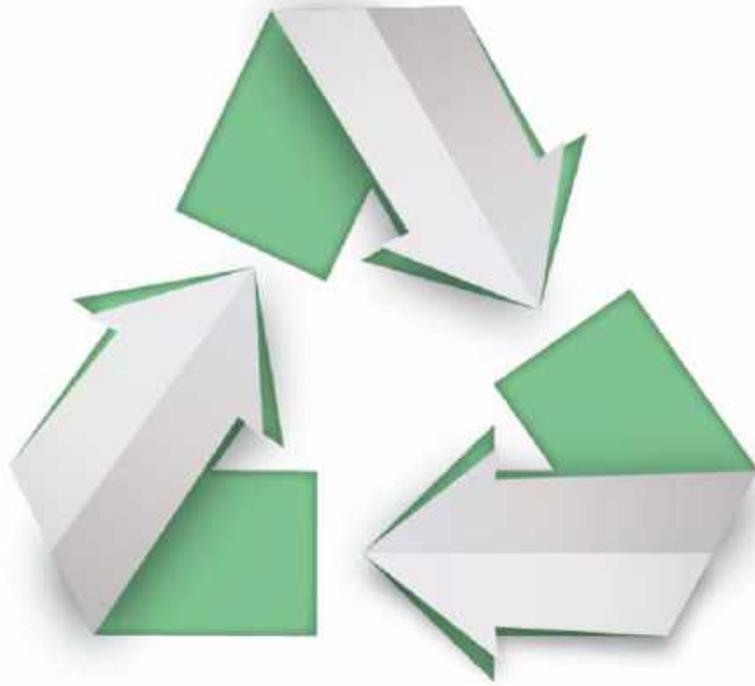
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