



6 best Mac keyboards on test

> Issue 404 > June 2024
> macformat.com > @macformat

Mac FORMAT



Fast fixes
for your Mac
The genius tricks you need!

IN-DEPTH REVIEW

M3 MacBook Air

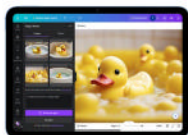
The definitive verdict on its features, power & performance



+
AI Robot!
Apple's next
big thing?
See p6



Create amazing posters on iPad
Unleash your arty side!



Shoot smarter iPhone movies
Action mode & more

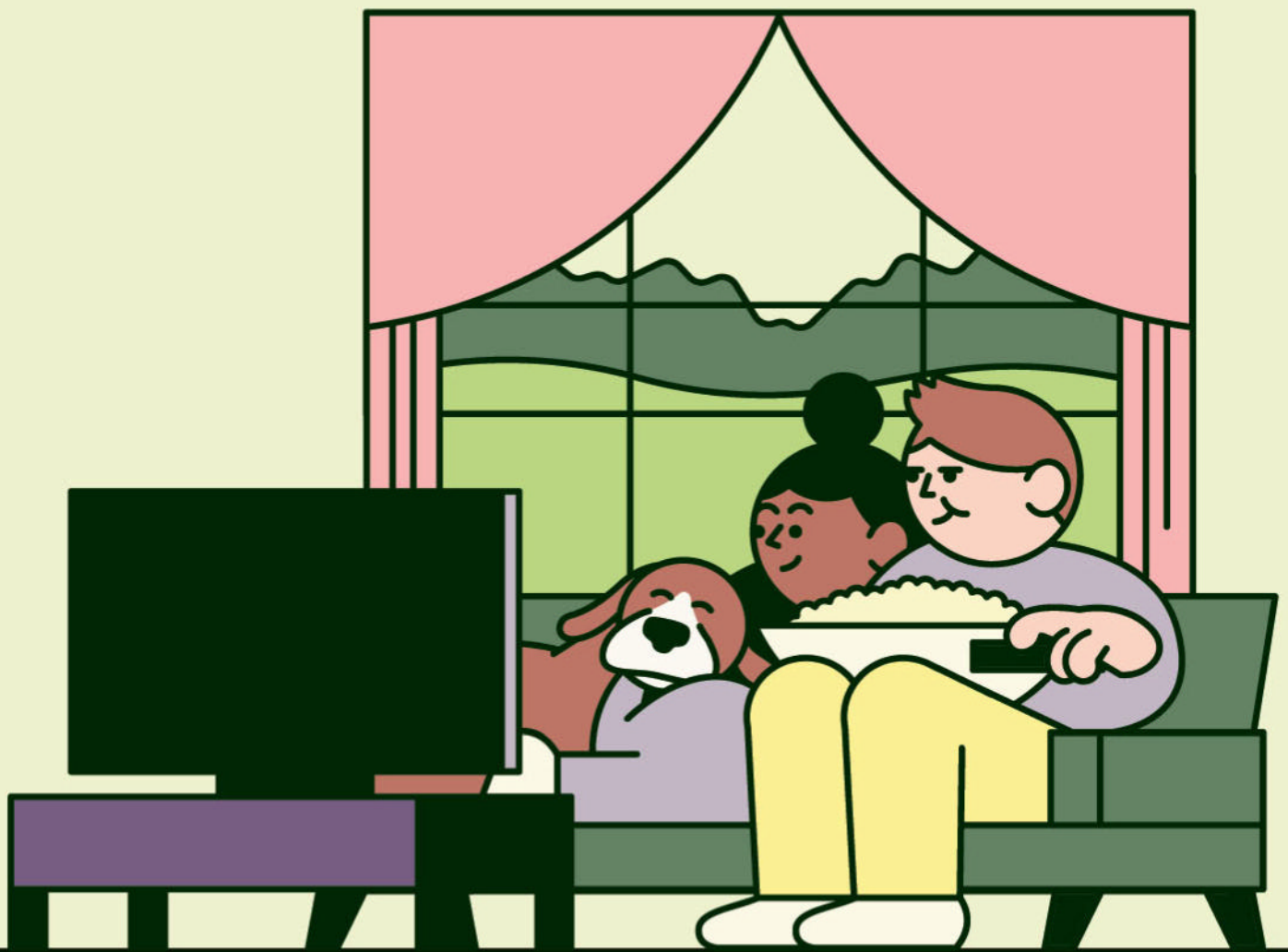


Brighten up your Mac's display
Screen-boosting tips



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Hot on the heels of the Vision Pro come rumours that Apple is already working on its Next Big Thing – and its robots that Cupertino may have set its sights on. The company is rumoured to be working on two possible options: an AI-powered robot that follows you around the house and can carry out chores like washing the dishes; and a desktop robot whose display can follow your every move. While the first one could conceivably be something like Amazon's Astro; the desktop robot seems more like an iMac G4, only with a motorised arm.

Now that's a robot we'd like to see. You can find out more on p6.

Apple, of course, isn't the only company that's dabbling in robots – there's the aforementioned Amazon Astro, of course, but Samsung has its Pacman-like Ballie; Sony has its cute robot dog Aibo, and Panasonic is working on NICOBO, which looks like a bobble hat with eyes and a tail. Car companies, too, have long experimented with robotics, with Honda's ASIMO, Toyota's trumpet-playing robot, and its palm-sized Kirobo, which entertained astronauts on the International Space Station, so it'll be interesting to see what Apple's take might be.

Back down to Earth and you'll see that this issue is packed with great things to read about and to do – from our 13-page guide to fixing your Mac (p20), to in-depth reviews of the M3 MacBook Air 13in and 15in (starting on p78). Plus there's a round-up of the best keyboards for your Mac on p86 too.

Rob

ROB MEAD-GREEN
EDITOR
editor@macformat.com

Meet the team



Jo Membery
Operations Editor

➤ Jo's hoping for an Apple iBin – a robot that goes around the house collecting rubbish, and remembers to take itself outside on bin collection day.



Paul Blachford
Art Editor

➤ Paul's got his fingers crossed for an iPodoch – a robot dog that can take itself for walks. Or failing that, one that'll pick up what it 'leaves' behind.



Ian Osborne
Contributor

➤ Ian's hoping that since Apple uses ARM-based chips, it'll come up with some robot limbs to make writing features and how-tos easier.

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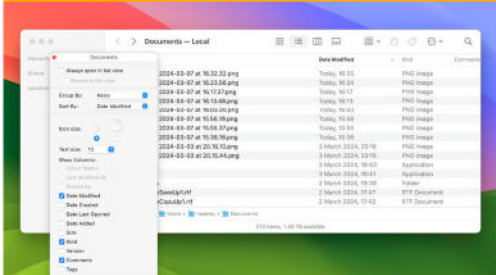
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Group test: Best Mac keyboards

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APPLE CORE

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HOT TOPIC!

Apple wants to build a home robot

"Hey Siri, load the dishwasher"



Last month, we covered how Apple's much-rumoured electric car project had been cancelled.

Well, Apple has apparently found a new "next big thing" to replace the car with, and we guarantee it's nothing like what you're expecting.

If a new report from Bloomberg's Mark Gurman is to be believed, Apple has settled on a range of smart home robots that will act as helpers around your home. It's a stark departure from Apple's usual range of products - but then again, so was the Apple car.

Gurman's article says that Apple has a few different ideas in play, and that the company is actively researching and developing them all. The first is a home-assistant robot that would follow you around the home, ready to perform tasks for you. It would be able to navigate around obstacles thanks to an onboard algorithm, and might

work in a somewhat similar way to Amazon's Astro robot.

The original idea for Apple's robot was that it would be able to walk around your home entirely unassisted. As well as that, Gurman says that Apple had planned for it to be able to perform household chores, such as washing the dishes in a sink. That, however, proved to be too tricky and "would require



Apple isn't the only one interested in robots - Amazon's Astro has been available since 2021.

overcoming extraordinarily difficult engineering challenges," something that Gurman doesn't believe is likely to happen this decade.

It's not the only robotics project that Apple has apparently been working on, as the company has also explored a much smaller robot that would sit on a desktop. It would have an attached display that could move around depending on the situation.

For example, Gurman's report explains that "The idea was to have the display mimic the head movements - such as nodding - of a person on a FaceTime session. It would also have features to precisely lock on to a single person among a crowd during a video call." Senior Apple execs were excited by this project, and while it's not certain whether either it or the robo assistant will ever launch, the display robot is further along the development process,

Siri's AI boost

Siri has a lot of work to do to catch up with artificial intelligence (AI) rivals like ChatGPT, but Apple may have cracked it. In a paper dubbed 'ReALM: Reference Resolution As Language Modeling', Apple's researchers describe how the company's own large language model (LLM) can "substantially"

If Siri gets an artificial intelligence boost, it may be able to close the gap with rival services.

outperform GPT-4, the LLM that powers ChatGPT, when it considers tasks running onscreen as well as in the background. If that LLM makes it into Siri, it could be great news.

Researchers say there is still much to be done, but it's encouraging news for anyone hoping Siri will improve.

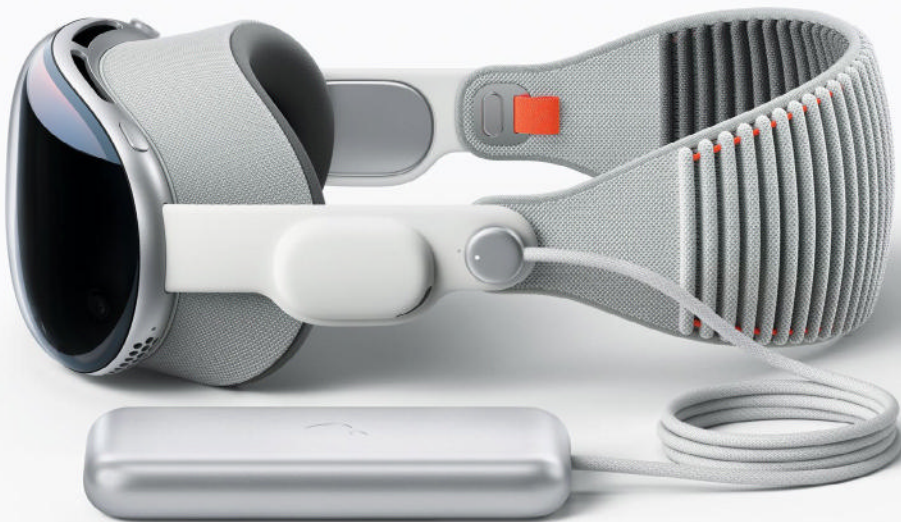
Will Apple fix the Magic Mouse?

The Magic Mouse 2 is notorious for its upside-down charging and uncomfortable design, and it's become something of a running joke among computer users of both the Mac and PC persuasion.

That might not be the case for much longer, though, as a new Apple patent has revealed how the company plans to overhaul its mouse with some fascinating new features.

The patent suggests that future versions of the Magic Mouse might include the ability to tilt the device from side to side or front to back. As well as that, Apple describes circular-shaped mice that could be rolled along their sides. In both cases, the movement might work as a new control method.

For example, these extra controls might let you perform functions "whether visibly apparent on a display screen of the computing device or not," Apple says. Which might mean you'll be able to adjust brightness, volume, brush sizes and more with just a quick flick of your wrist and tilt of the mouse.



Despite launching the Vision Pro headset, Apple is still looking for a different "next big thing".

Gurman says. Additionally, it has been reported that Apple is also working on a HomePod speaker with an iPad-like display. All in all, it seems that Apple is taking these developments seriously.

The next big thing

You might be asking why the Vision Pro is not Apple's "next big thing." Well, the company knows it will take years before the price comes down and the headset goes truly mainstream. And even then, the world of virtual reality headsets is still very young and the Vision Pro's future success is by no means guaranteed.

To keep the good times rolling, Apple is therefore in search of what it feels is a sure-fire moneymaker, and just like the

stormtroopers in *Star Wars*, droids could well be the thing that it's looking for.

Yet even Apple seems to have acknowledged that the robot project might fall flat. While Gurman says Apple execs liked what they saw of the desktop robot, they were also concerned "about whether consumers would be willing to pay top dollar for such a device." That doesn't sound like they're confident it will be a nailed-on winner.

So, what will Apple's next big thing be exactly? No one knows, and it seems not even Apple is certain. But while it tries to work that out, it might continue pouring money into home robotics. Who knows, you might one day have an Apple-branded robot take out the rubbish for you.



The Magic Mouse has gone largely unchanged for years but might get some new tilt-based functionality.

APPLE NEWS ROUNDUP

APPLE TV CAMERA

GESTURE SUPPORT AND VIDEO CALLS

> The Apple TV set-top box hasn't changed too much in recent years, but a future update could bring a built-in camera in a major change to the streaming device. Bloomberg's Mark Gurman has claimed that this camera would enable FaceTime video calling direct from the Apple TV, as well as in-air gestures that enable you to control it. We're not sure when (or even if) these features will arrive though.

SPATIAL COMPUTING ON YOUR MAC

WHO NEEDS A HEADSET?

> Apple's Vision Pro headset is all about spatial computing, but Apple might one day expand that concept to other devices. A new patent suggests just that, with Apple discussing how future Mac monitors and MacBook displays could use lenticular lenses to show viewers 3D content. The best part is this wouldn't even require a headset, hopefully making it much more accessible and affordable than a Vision Pro.



Apple has kept a tight grip on its app ecosystem, but pressure from the EU is causing its hold to loosen.

Apple will let you download iOS apps from third-party websites

The sideloading saga continues space for Apple

The European Union (EU) has recently forced Apple to open up its ecosystem to third-party app stores, essentially allowing users to 'sideload' apps onto their devices, mostly outside of Apple's control.

At first it seemed that this new policy would be limited to other app stores, but now it looks like Apple is going to let you download apps directly from websites, without ever having to go through an app store at all.

The functionality was implemented in the first developer beta of iOS 17.5, and in some ways brings iOS a lot closer to macOS, where you've

been able to download apps from websites for years. However, iPad users will not be able to get apps this way, as it's limited to those using iOS.

Apple is imposing several restrictions on this new policy. It only applies to users who are based in the EU and any developer wishing to offer apps on their website must meet a set of criteria: they must have been in the Apple Developer Program for a least two continuous years, have had an app with at least one million first installs on iOS in the previous year, and their apps must be notarised by Apple and come with clear data collection policies. If they hit those targets, they get the green light.

iPad Pro in line for upgrades

A matt display and better camera placement reportedly on the way

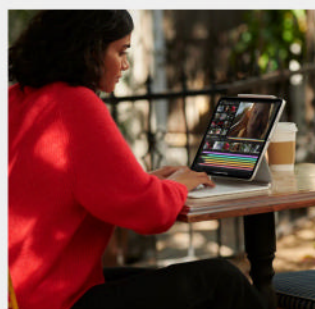
We're expecting a new iPad Pro any day now, and there are rumours of new features.

Among them, according to a leaker known as Instant Digital, is a side-mounted selfie camera that would make video calls less 'wonky'.

At the moment, the iPad Pro's front-facing camera is mounted on the top of the device. This means it's off to the side when you use it in landscape mode, which creates an odd effect on video calls. In landscape, a side-mounted camera would be situated at the top of the iPad, making

FaceTime calls a lot more natural and comfortable.

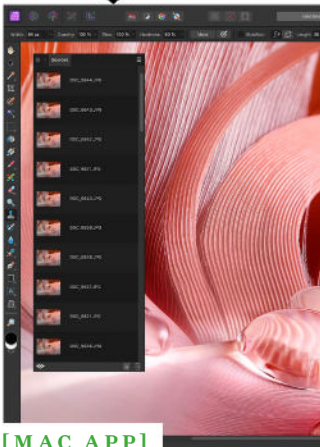
Another rumoured addition is a matt display. This would help to drastically reduce reflections and cut out



If you like using the iPad Pro in landscape mode, its rumoured changes might be just what you need.

blue light, thus helping to protect your eyes. There's a chance this matt display could use the same nano-texture glass as you find in the Pro Display XDR, which contains small etchings that reflect light in different directions and away from your eyes. There's no confirmation yet, though, so it's just speculation for now.

Whatever happens, it sounds like there could be some notable updates coming to the iPad Pro. At the time of writing, it was expected to be revealed in early May 2024 – 19 months since its last change in October 2022.

APP OF THE MONTH

[MAC APP]

Affinity Suite 2.4 £67.99

The latest new features coming to this much-loved set of apps



Having just been snapped up by Canva, Serif's popular suite of design apps has

been updated to version 2.4, and this brings a range of new features to Affinity Photo, Designer and Publisher.

Among the new features is the introduction of Layer States to Designer and Publisher. Instead of hiding individual layers when switching artboards, you can use the new

States Panel to manage everything. Beyond that, Affinity Designer now supports DWG and DXF exports for architects, there are improvements to object selection tools, and all three apps get an Alignment Options panel to reduce the hassle of lining up elements with different aspect ratios and dimensions.

The changes cement Affinity as one of the best choices available for photographers, designers and publishers, and the 2.4 update is free to anyone who owns a V2 Affinity app.



Media Picks

>What you should be playing and reading this month

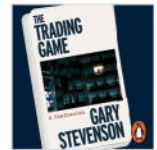

[ALBUM]

Audio Vertigo

Elbow

£10.99

>Elbow's acclaimed tenth album blends samba percussion, African rhythms, indie guitars and glittery synths with some of the band's best songwriting in years.


[AUDIOBOOK]

The Trading Game

Gary Stevenson

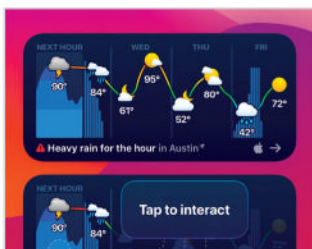
£7.99

>Gary Stevenson was a successful city trader until he started questioning everything in this "white-knuckle journey to the dark heart of an intoxicating world".


[PODCAST]

Black Box

>As AI becomes ever more prevalent, Black Box charts the highs and lows of this world-changing tech, from medical breakthroughs to criminal plots.


[iOS APP]

Weather Up – Live Widgets

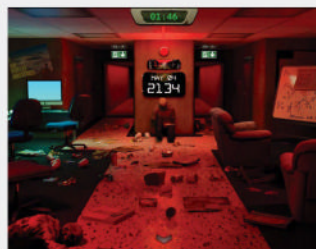
FREE (IAPs)



Weather Up combines detailed forecasts with a friendly interface. Perhaps

its best feature is its array of interactive widgets and Apple Watch complications. These condense info into glanceable views so you know what to expect without getting bogged down.

Why you need it: It's mastered the art of widgets.


[iOS GAME]

Recursion

£3.99



In Recursion, you are rudely awakened by the start-up sounds of a

time-loop machine. If you don't escape, you're destined to have your day reset over and over again – forever. The latest title from Glitch Games, Recursion is a humorous and devilishly tricky puzzler that rewards creative thinking.

Why you need it: It's bursting with Glitch Games' humour.


[MAC GAME]

Death Stranding Director's Cut

£34.99



Mac gaming keeps getting better, with the launch of Death

Stranding Director's Cut being further evidence. The dead are spilling over into the land of the living, but hope is not yet lost: it's up to you to connect the last survivors of a shattered United States and try to rebuild what remains.

Why you need it: It's one of Hideo Kojima's best games.

Crave

THE GEAR WE'RE LUSTING AFTER



Edifier QR65

► £329.99 ► From [edifier.com](https://www.edifier.com)

► **Desktop speakers are increasingly rare, which is why we're celebrating the arrival of Edifier's QR65 Active Desktop Monitors.** Capable of belting out your tunes at a staggering 70W, and in old-school stereo too, they'll look great parked on either side of your Mac - with either black or white finishes to choose from. You also get a choice of 11 different 3D lighting effects (available by pressing a button on the speaker's side) with other

customisation options available via the Edifier ConneX app for iPhone.

Each rigid MDF speaker cabinet is equipped with a 1.25in silk dome tweeter and a 2.75in aluminium mid-low driver, giving the QR65 a frequency response of 55Hz-40kHz. The speakers also have Bluetooth 5.3, USB-A and RCA (phono), and a subwoofer output onboard.

Completing your dream stereo set-up are a pair of angled aluminium stands.



Edifier's QR65 - look out for the review in the July issue.

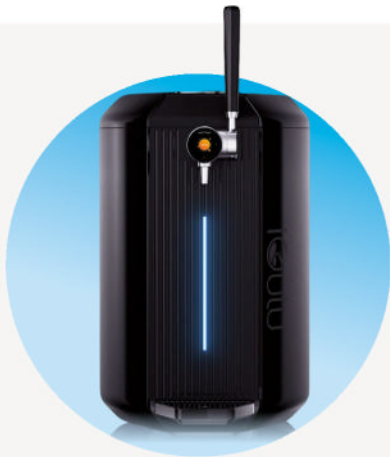
Campfire Audio Fathom

> £1,049 > From campfireaudio.com

> **Convenient they may be, but Bluetooth in-ears often compromise on sound quality – and that's a serious no-no if you're serious about your music.**

Enter Campfire Audio whose Fathom in-ears promise audiophile pleasures aplenty – and with a price tag to match. Armed with six custom-made armatures in each earbud, the Fathom eschew Bluetooth in favour of wired 3.5mm or 4.4mm connections, ensuring you can listen to them using your hi-fi or with your Mac.

With a frequency response of 5Hz to 20kHz, they'll sound great with any kind of music. Plus, they'll be comfy to wear with three pairs of marshmallow and silicone tips included, as well as a natty leather case. Luxury never sounded so good.



iGulu F1 Beer Brewing Station

> £555 > From igulu.com

> **Join the craft beer cognocenti with this app-controlled home brewing system.** Available in Black, Creamy White or Mint Green, the iGulu F1 can serve up Pale Ale, Bavarian Wheat and Amber Lager with a Stout option coming soon. It'll also ferment wine, cider and non-alcoholic drinks such as kombucha too. The Gulu F1 includes both a touchscreen and an iPhone app with recipes to get your brews just right. And it has temperature control to keep your beer fresh for up to 30 days. Go on, pour yourself another one.



Philips VoiceTracer Audio Recorder Pen

> £69.99 > From philips.com

> **Proof that the pen really is mightier than the sword, especially when it comes with a voice recorder built in.**

The Philips VoiceTracer can capture up to 129 hours of audio recordings to its 32GB of built-in storage, with easy transfer to your Mac courtesy of its built-in USB-C connector. Once your voice notes are on your Mac, fire up the Sembly web app or Google Chrome extension and your notes will be accurately transcribed using the power of AI. Naturally, the VoiceTracer works as a regular pen too.



ESR Qi2 Car Charger

> £35.99 > From esrgear.com

> **If you often use Apple Maps to get you from A to B, this Wireless Magnetic Car Charger from ESR could be just what you need.** Designed to be mounted on your car's dashboard or slotted into one of its air vents, it'll deliver up to 15W of charging power to your iPhone 13 or later via USB-C or with the supplied USB-C to USB-A adaptor. As it's the first car charger to be Qi2 compatible, it'll also work with compatible third-party cases and phones too, ensuring your Android-owning friends won't be left in your dust.



MATT BOLTON...

WOULD LIKE TECH DESIGN TO GO FULL CIRCLE AFTER 15 YEARS AND BRING BACK BATTERIES YOU CAN REPLACE YOURSELF

While I am far from the first person to suggest that swappable batteries should become a part of gadget design again, it came to my mind again recently thanks to the launch of Fairphone's Fairbuds.

These are true wireless earbuds (like AirPods), but the user can replace the battery in both the buds and case. They aren't hot-swappable batteries to provide longer nearly unbroken listening time – they take a little too much effort for that – but they can be swapped by anyone in a matter of minutes.

This core issue being addressed here isn't convenience (though there's no question that if you could pop a fully-charged battery straight into your iPhone or Apple Watch when needed, that would be really handy), but sustainability. AirPods, along with all the other big earbuds, aren't designed to be easily repairable. They have mini computers, complex

speaker arrangements and an array of mics built into a tiny amount of space around a battery unit, and – ideally – they're waterproof. Just sealing that whole unit closed is an understandable route to

The core issue is sustainability. Battery chemistry fails. It's not if, it's when

take. And if that creates a protective effect that means that the processing and speaker parts can last for years, then it doesn't seem like too much of a problem... apart from the batteries.

Battery chemistry fails. It's not if, it's when. And that when is generally about two years with current battery tech. Maybe not a total collapse at two years, but a deterioration of charge capacity will begin, and it can make earbuds annoying to use pretty quickly. Apple attempts to mitigate this in AirPods, Macs and iPhone with its optimised charging option,

but even that is delaying the chemically inevitable.

AirPods Pro 2 are a pretty mature version of this product at this point, and there's no reason hypothetically that someone wouldn't be able to buy a pair and enjoy them for over five years. But the odds of the battery still holding up aren't so good. Wouldn't it be better if, instead of going to landfill or a limited recycling option, after



Wouldn't it be useful to drop a new battery with two days of charge into your Apple Watch when you need it?



One screw is all you need to swap the battery in the Fairbuds' case. Almost seems too easy, doesn't it?

four years someone could easily get an AirPods battery replacement pack and make the swap themselves, giving their AirPods new life? It is possible to replace the batteries in AirPods, but it involves specialised gear and soldering skills. It's tricky enough that people will wonder whether it's worth the hassle and expense of doing it; while if you own the Fairbuds, it's a no-brainer, because it's so little effort.

I worked in an Apple repair store when we still had replaceable batteries on MacBooks, and if someone's old machine could no longer stay awake, we could just drop in a new battery. Of course, battery chemistry has improved massively, but the fundamental issue hasn't gone. And in that time, the sustainability impact of the tech world has become a hotter and hotter topic, and Apple has positioned itself as a leader in the area, including in recycled materials. But even better than recycling is less e-waste to begin with, and I'd love for Apple to pick up this area where Fairbuds are leading.

ABOUT MATT BOLTON

➤ Matt is Managing Editor at 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".

Apple's Worldwide Developers Conference in

NUMBERS

The key stats and facts behind Apple's annual WWDC

5,000

> Number of attendees at WWDC 2019 – the last fully in-person event before the pandemic. Delegates came from 86 countries to San Jose in California.



4,200

> Number of delegates who attended the 2006 WWDC, where Apple said goodbye to the PowerPC processor and hello to the Intel Xeon-powered Mac Pro.



350

> Number of possible winners for the Swift Student Challenge, which has taken place every year since 2020. The programming contest is open to students aged 13 or over.



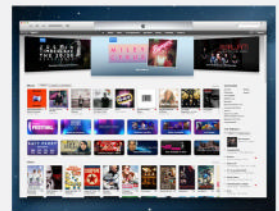
23 million

> Number of registered developers from 155 countries and regions eligible to participate in Apple's online-only WWDC in 2020. Over 100 engineering sessions were available, with over 1,000 Apple engineers taking part.



1983

> The first year Apple held what's become one of the most important events in its calendar.



1 hour, 43 mins

> Time it took for \$1,599 developer tickets to sell out at WWDC 2012. The event saw the launch of Apple Maps, OS X Mountain Lion and iOS 6.



10-14 June

> Date of this year's WWDC, which will be held both online and at Apple Park. Expect to see new versions of macOS, iOS, iPadOS, watchOS, tvOS and visionOS, as well as an AI-powered Siri.



CONTACTS

Have your say on all things Apple!

Contact us

> Email your queries
and your questions to
letters@macformat.com

LETTER OF THE MONTH!



HOMEKIT CONUNDRUM

Your Beginners Guide 'Automate your smart home' (#MF403) was invaluable. However, I seem to have come across an unspoken challenge in the installation of smart home devices which require/use Matter. The issue is associated with the Wi-Fi router which I have discovered also needs to support the protocol. The requirement is not mentioned

in your article or identified on the Eve website, whose devices I have been using. If my experience is typical it would appear routers provided by ISPs are generally not compatible!

Over the years, I have installed a number of Eve devices which have worked very well. Recently, I purchased and attempted to install an Eve Motion which requires a 'compatible Thread border router'. To ensure this compatibility I also purchased a HomePod mini.

The conclusion from attempting the installation, and having had extensive email communications with Eve technical support, is that my existing router does not support the required protocol, or more specifically to quote Eve Systems "mDNS/multicast and IGMP Snooping (if available) are not enabled".

Given that I am soon to be served by FTTP (fibre to the premises), I checked if the router that would be provided with that service would be compatible. To my horror, the FAQ for the router - a LinkSys SPNM55 - states "Does the node support Apple HomeKit? - No".

I asked Eve technical support if they had a list of Wi-Fi routers proven to be compatible with the Eve Motion and Apple Home. The answer was no.

Is this problem, which appears to me to be the incompatibility of Wi-Fi routers with Matter, commonplace? And, if so, is it worthy of comment in either Genius Tips or one of your articles?

by T MARTIN

ROB SAYS...

HomeKit-compatible routers are still something of a rarity, despite Apple launching its HomeKit Secure Router program in 2019 (although, according to some reports, it also seems to have abandoned it). On its Apple Support page (bit.ly/mac404homekitrouters), Apple lists only two routers as being HomeKit compatible: the AmpliFi Alien (£399.95) and the Linksys Velop AX4200 (£259.95), both of which are available through the Apple Store.

While most HomeKit products should work fine when teamed with a Thread border router such as the HomePod or HomePod mini, there are exceptions - we've never been able to get the Eve Motion to work on our smart home system either. There is a wider issue too with ISP-supplied routers, both when it comes to HomeKit and because they often have

limited functionality and features. Where possible, we'd recommend you replace your ISP-supplied router with something more capable, although we appreciate that it's not always possible - or desirable - to do that.

TO CROP OR NOT TO CROP

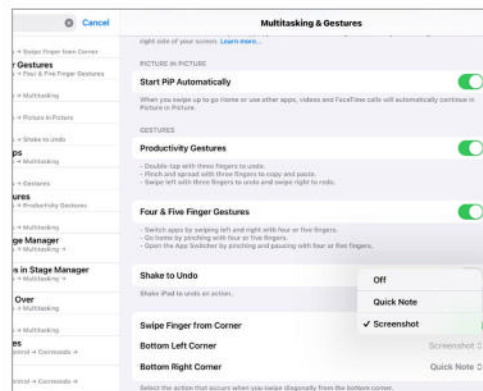
In #MF403, Steve Sanford asked about cropping a screenshot before it's saved, and Rob, the editor, replied that it wasn't possible on iPads. Not true actually! Screenshots can be very quickly cropped beforehand using Gestures. Go to Settings > Multitasking & Gestures and make sure 'Swipe Finger from Corner' is set to on. Then select Screenshot from the drop-down menu for Bottom Left Corner (or Right). Once that's set, any time you want a screenshot, swipe up from whichever corner you chose. Then quickly drag the handles of the shot to the part of the image you want to keep, and tap Done.

I use it all the time, and my only complaint is the file size of Apple screenshots. If they're opened and then saved in ACDSee, they're often several MBs smaller, while looking the same. If only Apple gave us a choice of file size for screenshots...

by ALISON NAPIER

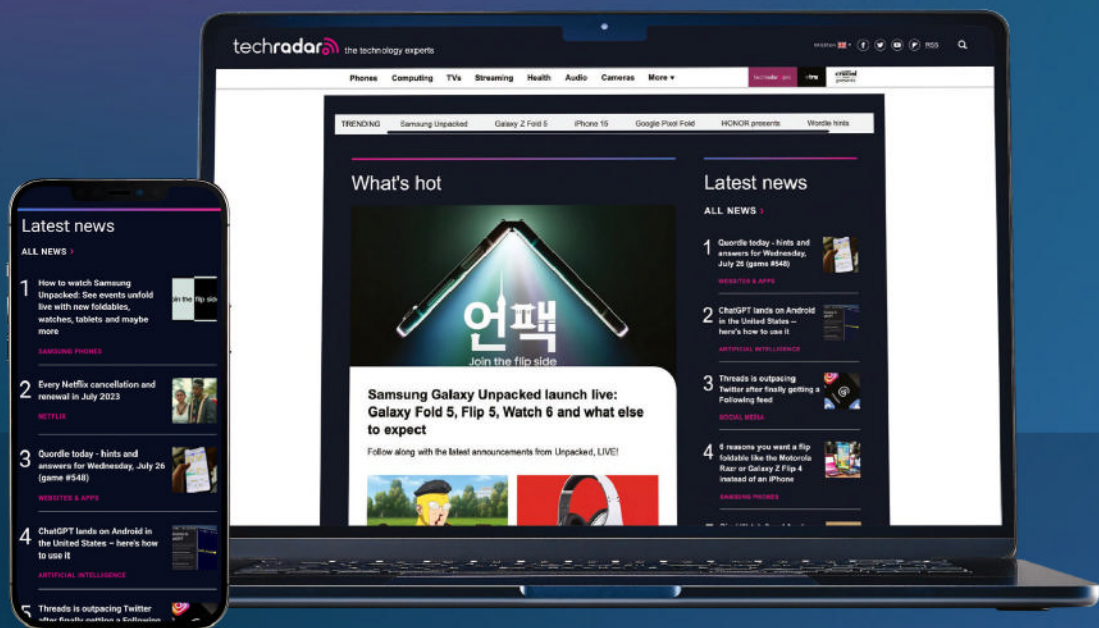
ROB SAYS...

We're happy to be corrected - thank you for sharing that very useful tip. It just goes to show there's always something new to learn!



Go to Settings > Multitasking & Gestures > Swipe Finger From Corner > Screenshot to crop screenshots before saving.

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Mac
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INVESTIGATES

Uncle Sam vs Apple

Regulators around the world are coming for Apple. We take a look at the challenges it faces

WRITTEN BY **CHARLOTTE HENRY** >



Apple is no stranger to legal and regulatory challenges, but things have gone up a gear recently. You can read about some of those issues, like the controversy around sideloading in [#MF402](#), and other previous issues of *MacFormat*. Those actions were predominately

based in the EU. Now, though, the US justice system has its sights on Cupertino.

On 21 March, the US Department of Justice Antitrust Division filed a case in New Jersey against Apple. The 88-page document starts by explaining that “for many years, Apple has built a dominant iPhone platform and ecosystem

For our latest
subscription offer
see page 34!



that has driven the company's astronomical valuation."

It adds that Apple decided to "meet competitive threats by imposing a series of shapeshifting rules and restrictions in its App Store guidelines and developer agreements that would allow Apple to extract higher fees, thwart innovation, offer a less secure or degraded user experience, and throttle competitive alternatives."

Later, the document alleges that the company "wraps itself in a cloak of privacy, security, and consumer preferences to justify its anti-competitive behavior." This comment is worth remembering as we explore the issue. It is the one most likely to rankle Apple leadership as it essentially boils down to an allegation of hypocrisy.

The fundamentals

In some ways, what the DOJ appears to dislike about Apple are the very characteristics that have become fundamental to the company. They are born out of its inception, from when Steve Jobs and Steve Wozniak first combined forces and the respective roles were taken up by the two men.

In his biography of Jobs, Walter Isaacson explains how the partnership developed, even from the early days:

"Wozniak would be the gentle wizard coming up with a neat invention that he would have been happy to just give away, and Jobs would figure out a way how to make it user-friendly, put it together in a package, and make a few bucks." But it's that user-friendly nature and ability to package products, as well as making money, that has ultimately caught the eye of regulators around the world.

The DOJ filing provides examples of alleged wrongdoing, some of which

readers will be familiar with. They include, for instance, the cut Apple takes from third-party App Store purchases and subscriptions. But this is not just an App Store issue. Some of the allegations revolve around the way Apple hardware interacts with each other.

The DOJ says that "by suppressing key functions of third-party watches – including the ability to respond to notifications and messages and to maintain consistent connection with the iPhone", Apple is reducing the draw for consumers to buy other smartwatch brands.

The argument put forward by the DOJ is logical and coherent. As highlighted with the Apple Watch example, the heart of the action boils down to the accusation that it is hard to leave the iPhone world because it is complicated and costly to do so, and that this situation has been intentionally engineered. This is bad for consumers and the tech industry as a whole, according to those taking action.

Lee Hepner, Legal Counsel at the American Economic Liberties Project which looks to argue against monopolies, backs that argument. He explained to *MacFormat* that "the DOJ's case includes extensive

It has been alleged that Apple suppresses the key functions of other smartwatches when it comes to iPhone compatibility.





The iPhone may be incredibly popular, but it's far from being the only smartphone available.

allegations that Apple has created high switching costs, which essentially lock consumers into Apple's product ecosystem, to the detriment of innovation and product quality across industries."

"Over 90% of iPhone users replace their smartphone with another iPhone, and that includes consumers who would otherwise be inclined to switch to another device but find it too difficult or costly to switch between walled off product markets," he said.

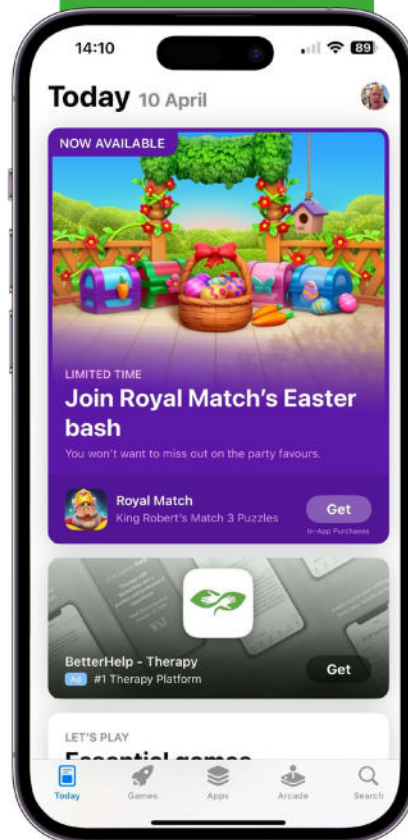
"The case against Apple is about lowering those barriers so that consumers have a meaningful choice in the marketplace," Hepner added. "When you give consumers a meaningful choice – which Apple's high switching costs prevent – companies must compete by offering higher-quality and competitively priced products."

This is all, of course, the exact opposite of what Apple claims it is doing. It has long insisted that the walled garden it has built is to the benefit of customers, creating a controlled environment that provides a better experience, alongside security and privacy for users. No product launch or event goes by without these points being made at every juncture.

Mitch Stoltz, IP Litigation Director at the Electronic Frontier Foundation (EFF), does though take a similar view to that put forward by Hepner. In a statement, he said:

"This antitrust suit against Apple is timely and welcome. Apple's anticompetitive practices, like barring competing app stores, blocking secure messaging with Android devices, and limiting the functionality of

Apple takes a cut from subscriptions and in-app purchases on the App Store...



... but then developers make revenue from selling on Apple's platform.

competing apps and smartwatches, all while keeping users locked into the iOS platform, have hurt innovation and made consumers poorer. We are happy to see that this suit by the DOJ [and states] focuses on the importance of interoperability between devices and software from different vendors, and how Apple's efforts to block interoperability have hurt consumers."

Specifically talking about the issue of security, Stoltz said:

"This suit says what EFF has been saying for a long time: Apple only protects users' privacy and security when that protection is good for Apple's bottom line. Apple's argument that monopoly is safer for users than competition is wrong, and is contrary to a century of antitrust law."

However, some experts do seem to have some sympathy with Apple's argument regarding their ability to better protect customers due to the design of its ecosystem. Danny Rogers, CEO of the cybersecurity company iVerify, told The Verge:

"Our data from millions of device scans on iOS and Android devices around the world suggests that open app stores lead to more malicious activity than closed ecosystems. So while opening up app stores to third parties might be good for competition, it will likely increase malicious activity as well."

Helping out rivals

There are other, perhaps more philosophical, questions to ponder – why shouldn't Apple build an ecosystem in which its hardware products work best with each other? Why should it help out its rivals?



Developers on the App Store and Mac App Store adhere to strict regulations from Apple.

In simple terms, effective markets, should produce healthy competition prompting innovation and improvements whilst also lowering prices. And this, in turn, is beneficial for the consumer. There is no doubt that high-end smartphones, both iPhone and Android, are expensive. However, there remain cheap alternatives on the market. Apple just doesn't want to make them.

Other smartphone makers can compete with Apple to try and win people over at premium end of the market. Indeed, if you look at some of the innovative camera products being offered by Samsung it is clear that they are. Yes, it is a bit fiddly moving between iPhone and Android, but that cuts both ways, and if the incentives are there for the customer, ie, the Android phone is noticeably better or better value, plenty will surely make the leap.

While Apple products are, by and large, more expensive than those of their rivals, most



The AirPods Pro work in perfect harmony with iPhone.

of us Apple fans benefit from their tight integration. It's easy to move from one iPhone to the next; your Apple Watch can instantly unlock a new MacBook Air, and you can easily control the audio playing from your iPhone to your AirPods Pro via Siri.

It's hopefully a given that a company is going to design its products to give customers the best possible experience. While the arguments put forward around the costs of leaving the ecosystem are reasonable, it is not impossible to do so. Plenty of people choose not to use iPhones. And, of course, Google and the like get revenue from subscriptions and in-app purchases made through the App Store...

It also seems that, to some extent at least, Apple is being punished for its success and the quality and reliability of the ecosystem it's created. An ecosystem which generally makes technology easier to use.

The DOJ filing says that Apple has built a "moat around its smartphone monopoly" that is "wide and deep". Furthermore, it alleges that "it uses a similar playbook to maintain its monopoly through many other products and services".

The criticism includes claims that "Apple has impaired third-party location trackable devices that fully function across platforms" and it has "impaired third-party, cross-platform video communications apps whilst steering users to its own video communications app, FaceTime."

And the list of allegations goes on...

Driven to succeed

While it's easy to criticise some of Apple's practices, the tech giant is also hugely successful at what it does – creating products that we all love to own and to use.

The iPhone has achieved its popularity, not by barging rivals out of the way, but by creating premium products that offer high-quality user experiences. Time and again in product surveys, Apple and its iPhone score incredibly highly. That has led 1.334 billion people worldwide to choose an iPhone over any other smartphone, according to Statista – yet that figure still only represents 23% of the entire global market. In the US, the story is different, true, with iPhone accounting for 62%, but even that points to its popularity, not its monopoly.

Whatever your view, it is clear that regulators around the world are not going to give up in their pursuit of Apple. The end result of its latest challenges could be to fundamentally change the company and its products, and that could be both a good thing and a bad thing for consumers.



There's a good reason why the Apple Watch has been so successful – it's the best wearable by far.

FAST FIXES FOR YOUR MAC

Written by Ian Osborne



Having trouble with your Mac? This expert guide will equip you with the know-how you need to get it running smoothly again



One of the reasons we love our Macs so much is they just work. There's no need to worry

about clashing hardware, software compatibility or a host of other irritations that plague users of other computers. You know exactly where you're at with a Mac.

Yet this doesn't mean they won't ever give you problems. With a machine as complicated and advanced as a Mac, a few issues are bound to arise from time to time. Thankfully, they're often simple - and inexpensive - to resolve.

Mac problems are usually software issues, and can be fixed at home, without taking your computer to the Genius Bar at your local Apple Store. Likewise, issues with your files can be fixed quickly and easily, and if an individual file has been deleted or has corrupted,

you can retrieve it using your backups; we show you how to do this. We also show you how to fix iCloud issues, and squash problems you might be having with your home or small business network. Finally, we look at hardware hiccups you might have with your peripherals and accessories. Are your Bluetooth speakers not playing nicely with your MacBook? Is your new external drive not recognised when you plug it into your Mac? Our straightforward tips show you exactly what to do.

And remember, if you can't solve your Mac problems yourself, the Genius Bar is always an option. Go to apple.com/retail/geniusbar to make an appointment at your local Apple Store. The experts there can solve almost any Mac problem, and unless they have to physically take it apart, the fix is often free.



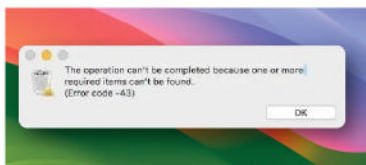
The Golden Rule: Restart your Mac

If you're having problems with your Mac - or any other piece of technology - the first thing you should do is turn it off, count to 20 and then turn it on again. Restarting

your Mac in this way frequently fixes issues. Likewise, if it's an application that's not behaving as it should, quit and reopen it. You'll be surprised how many times this works.

Help! My Mac is broken!

Having problems with your computer? Follow these tips...



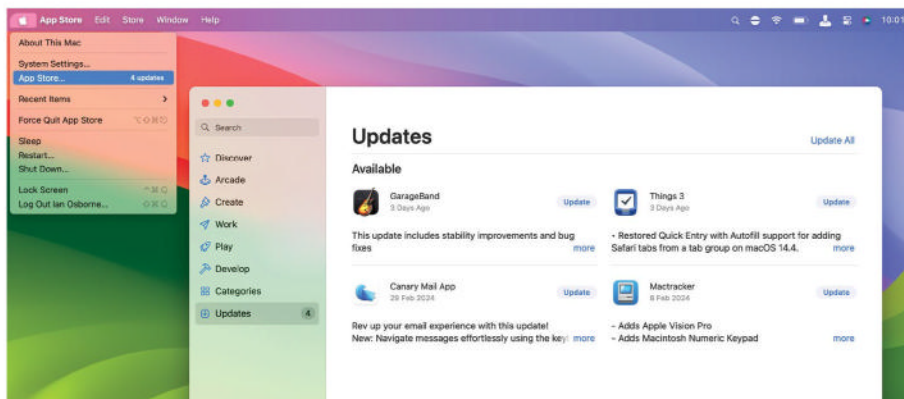
Mac error codes

We've all seen them. Those irritating error windows that pop up while you're trying to do something on your Mac are never welcome, but if you know how to read them, they can tell you much about what's gone wrong.

Error code -36, for example, occurs when copying files, and Error code -500 means there's a problem with an App Store download. There's a great article on error codes and what they mean at macpaw.com/how-to/mac-error-codes-guide.

Force Quit a misbehaving app

If an app has crashed with the spinning beachball, or simply isn't behaving as it should, quit it and relaunch. If Cmd+Q doesn't work (which is highly likely if it's crashed), click the Apple icon in the top left of the menu bar and select Force Quit. Alternatively, press Cmd+Opt+Esc. In the Force Quit Applications window that appears, select the app that's giving you trouble and click the Force Quit button.



How to squash those bugs

macOS and the apps that run on it are very reliable, but given the complexity of today's software, it's inevitable that a few bugs will creep in. These bugs are squashed by free updates, so it's

important to keep your apps and macOS up to date with the latest bug fixes. Click on the Apple icon, and if App Store or System Settings is captioned '[X] updates', select that option and update.



Problems booting your Mac

If your Mac is having trouble booting up, try starting it in Safe mode. This disables all startup items and third-party design features. If your Mac has an Apple silicon chip, press and hold the Power button on your Mac until you see 'Loading startup options'. Choose your

startup volume, hold the Shift key and click 'Continue in Safe Mode'. If it has an Intel processor, restart and press and hold Shift until you see the login window. Log in (maybe twice) and you'll boot in Safe mode. Then investigate which app is causing the problem.

Useful Problem-Solving Apps

These apps are useful for finding and fixing issues. The first three are bundled with macOS, so you already have them.

Disk Utility



Disk Utility (Applications > Utilities) is great for fixing drive issues. Click on the drive in the left-hand side panel, and click First Aid in the toolbar. You can also mount, partition and reformat drives.

The Console



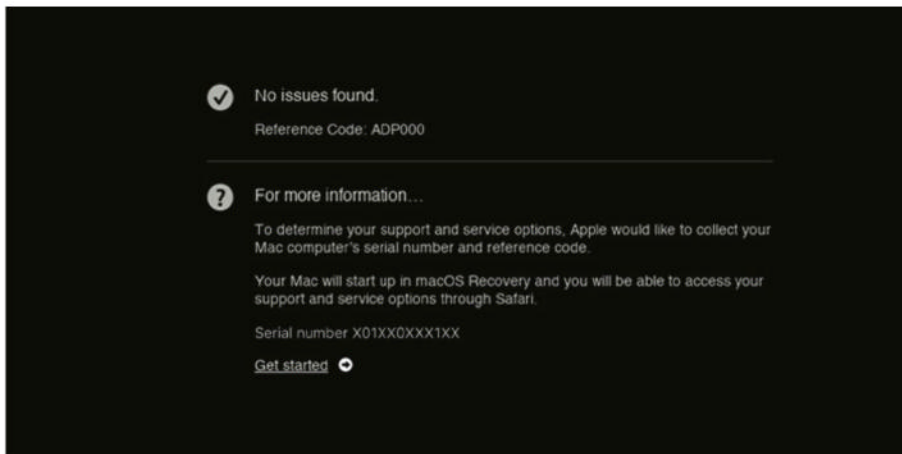
Also in Applications > Utilities, Console gives access to crash reports, logs, diagnostic info, system logs, etc. This provides valuable info for technicians. You can copy and paste it into an email or on a forum too.



My Mac is running S-L-O-W-L-Y

Try freeing up some storage space. Look through your Mac's storage drive for apps you no longer use, files you no longer need and media you no longer want. Move them to the Bin, then empty it; if it's not emptied, the files still take up

space on your Mac. Photos, iMovie and Mail have their own bins. Remember to empty these too. CleanMyMac X is great for identifying files you've not opened in a while, as is DaisyDisk (shown above, daisydiskapp.com).



I'm having hardware issues

Run Apple Diagnostics. On an Apple silicon Mac, press and hold the Power button to turn on your Mac. When you see Options, release the Power button and press and hold Cmd+D. On an Intel Mac, turn it on and immediately press and hold the D key. Release it when you

see a progress bar or you're asked to choose a language. If using the D key doesn't work, press and hold Opt+D at startup instead. Apple Diagnostics checks your Mac for issues. There's a list of useful diagnostic reference codes here: support.apple.com/en-gb/102334.

Activity Monitor

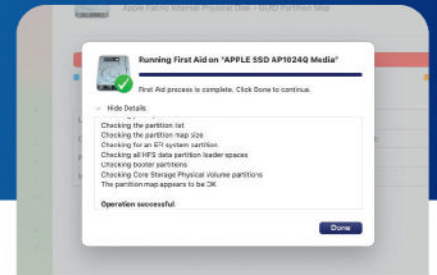


Another app found in Utilities, Activity Monitor shows processes that are active on your Mac. If your computer isn't running as it should, a check here might identify an app that's using too much memory or CPU processes, for example.

CleanMyMac X



CleanMyMac (macpaw.com) is an excellent all-round maintenance tool. It can get rid of system junk, identify large files you've not opened in a while, clean-uninstall apps, securely delete confidential data files and more.



How to use Disk First Aid and Recovery



Open Disk Utility from Applications > Utilities.

If you can't start your Mac properly, use Recovery Mode. For Apple silicon Macs, turn on and hold the Power button until you see the startup options window. Click the gear icon labelled Options, then click Continue. For an Intel processor, turn on your Mac then press and hold Cmd+R until you see an Apple logo. Either way, you then enter your password if asked, then from the Utilities window, select Disk Utility.

Select the drive you want to check in the sidebar, then click First Aid in the toolbar. In the window that opens, select Run and the checks are made. If you're offered a Repair Disk button, choose it and Disk Utility attempts to repair your drive. This might be as simple as ignoring damaged sectors in the future.

When you're done, if you opened Disk Utility as normal, you can close it. If you did so through Recovery, restart your Mac.

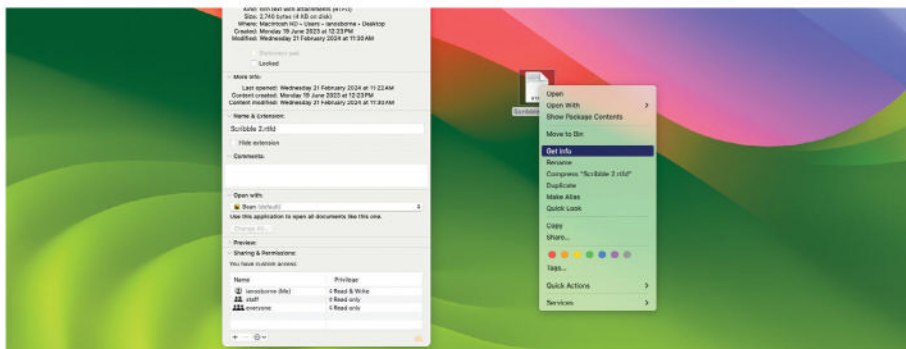
Help! I'm having file problems

Lost a file? Opening with the wrong app? We solve all this and more

Store in iCloud

If a file is stored in iCloud Drive, you'll be able to access it from any Apple device that's signed into your Apple account, and computer or mobile device with a web browser by logging into [iCloud.com](https://www.icloud.com) and signing in.

To access your iCloud Drive from your Mac, open a Finder window and click iCloud Drive in the sidebar. There are already folders in there, for apps such as Pages, Numbers and Keynote. You can also create new folders and drag files into and out of iCloud Drive just like you would with any other Finder window.

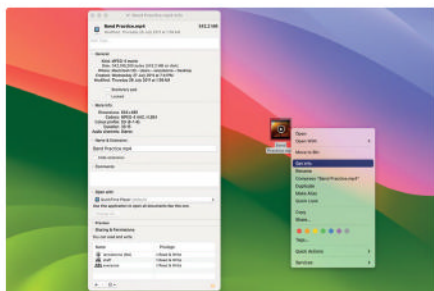


I can't access a file

If a document won't open, it might be corrupted. If this is the case, you might have to delete it and obtain a working copy. But if it won't let you open it or it opens but won't let you edit it, Ctrl-click on the file and select Get Info

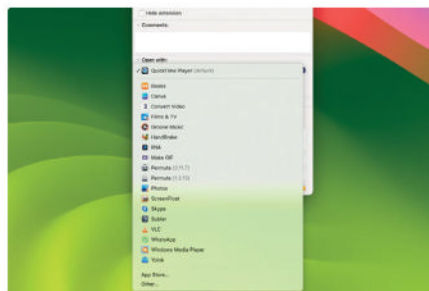
from the menu. The Information window opens. Click the chevron next to Sharing & Permissions at the bottom, and make sure you have Read & Write privileges. Change them if necessary; you will need your admin password.

How to Change file associations >



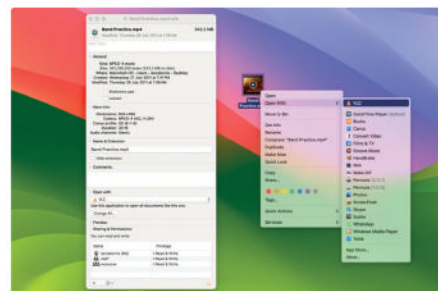
1 Open the Info window

You can change which app opens a file. Ctrl-click on the file, and choose Show Info from the window that appears. This shows a range of information about the file. You can lock it, change the file name and more from here.



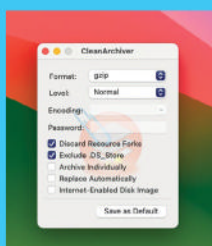
2 Open in another app

If it isn't already open, click the chevron next to 'Open with', near the foot of the window. By default, this shows the default app that opens the file; simply choose the app you'd prefer to open it with.



3 Change all apps

If you want to change every file of that type to open in the other app, click the Change All button. If you only want to open the file in the other app once, Ctrl-click on it and select it from the Open With option.



Clean system files

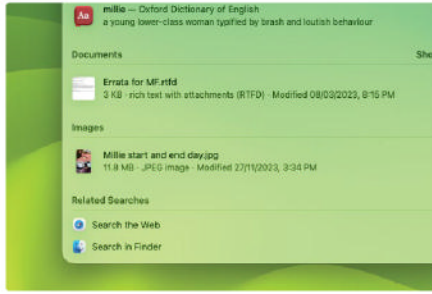
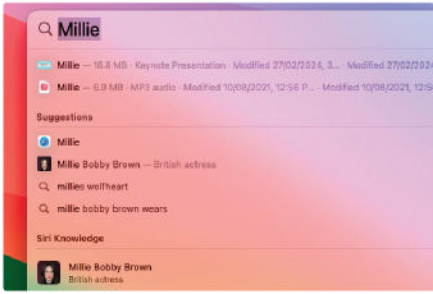


Sometimes, non-Apple devices and third-party peripherals fail to open archives made on a Mac. This might be due to system files that are invisible on the Mac, but can

cause problems for non-Apple gear. Their file names begin with a dot, and they set things like where icons appear in a folder window. To make an archive without these files, download

CleanArchiver (bit.ly/macupdatecleanarchiver) and make the archive with that instead of macOS' own archiver. This will be devoid of Mac resource forks.

How to Find files faster with Spotlight >



1 Open Spotlight

To open your Mac's Spotlight window, click the magnifying glass in the menu bar or (if available) on the Function keys, or hold Cmd and tap the Space bar. Type in the name or partial name of the file or app you want.

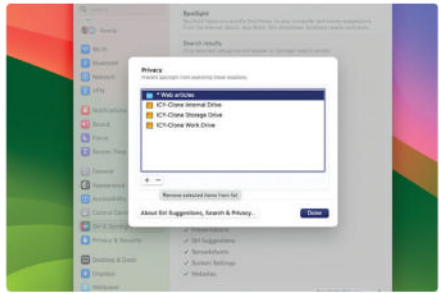
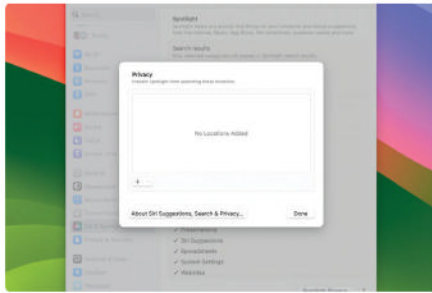
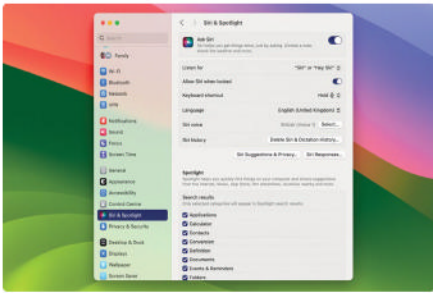
Find in Finder

✓ You get a lot of results, including images, suggestions for searches, file names, websites, Mail messages and more. To search for that term in Finder, scroll to the bottom of the Spotlight search and choose that option.

Customise Spotlight

In Settings > Siri & Spotlight, you can choose which categories of files, documents and data are indexed and searched for in Spotlight. Simply use the checkboxes to activate or deactivate a category.

How to Hide drives from Spotlight >



1 Open Settings

By default, Spotlight indexes and searches all attached drives as well as your Mac's internal drive, but there are some that you might not want to be covered, such as backup drives. Open Settings > Siri & Spotlight.

Take some options off


Scroll up and click the Spotlight Privacy button. A window titled 'Privacy' appears. Click the '+' icon in the bottom-left of this window, and select a drive or folder you *don't* want to be covered by Spotlight to add it to the list.

Remove drives/folders

You can add as many files and folders to this Privacy window as you wish, though Time Machine drives cannot be added. To remove a drive or folder from the list, click on it and click the '-' button (bottom left).

I can't AirDrop files



 **Make sure both your Mac and the device you're trying to AirDrop to have Bluetooth and Wi-Fi switched on.** Next, ensure they're connected to the same

Wi-Fi network, and within 30 feet (10 metres) of each other. When you try to AirDrop a file, you see a radar-like window showing nearby devices, listed by name. If the person/device you're trying

to AirDrop to isn't shown, speak to the person who owns it and make sure they've switched AirDrop on and their device is unlocked. Their icon should then appear in the AirDrop window.



Help! My backups are broken

It's always wise to back up regularly, but what if you have problems?

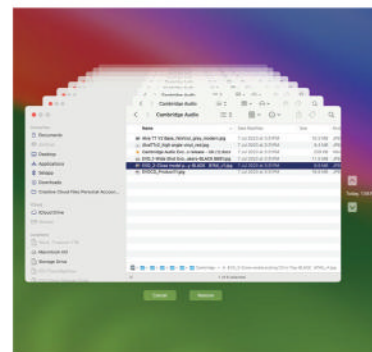


o you have too many backups, or not enough? Can you easily recover from the backups you do have?

Here we talk you through how you can create and restore from Time Machine backups, and also how to clone your internal and external drives using third-party apps. We strongly recommend you use both Time Machine and drive cloning apps. Time Machine is great for delving into to retrieve a file deleted in error, or for restoring your Mac from a previous backup. Cloned backups, on the other hand,

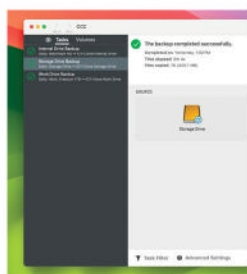
are kept in exactly the same state as the drive you're cloning. Therefore, if the original drive ever fails, you'll have an exact copy of it.

Here's a quick tip about Time Machine. If you need to recover an accidentally deleted file, or one that's been edited and you need an older version, open the Finder window where it is - or was - stored. Open Time Machine and navigate to the time and date when the file you want was present, or before the edit. Click on it, then click the Restore button to recover the file, or an earlier version of it.



With Time Machine, you can recover a single file or folder which you've subsequently deleted or incorrectly modified.

5 other ways to back up your Mac >

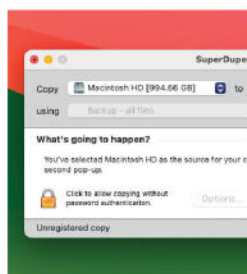


Carbon Copy Cloner

> £40.85 > bombich.com



> **Clone your Mac's hard drive, or your external drives.** You can back up anything from a single folder to a complete hard drive, and schedule backups so they're always up to date. It's an excellent backup application.

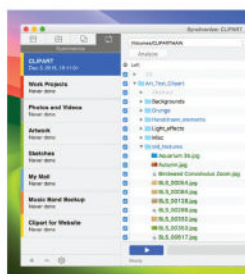


SuperDuper!

> £27.25 > shirt-pocket.com



> **Another cloner, SuperDuper!** offers a clear and friendly interface, scheduled backups, smart delete, native Notification Centre and more. Whether you go for SuperDuper! or Carbon Copy Cloner is largely a matter of preference.

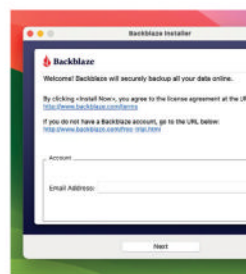


Get Backup Pro

> £28.50 > belightsoft.com



> **Get Backup Pro** lets you back up and archive your data, clone your drives and sync folders and drives. Quickly back up data, create bootable and encrypted backups, sync folders, and be confident that your data is safely stored.

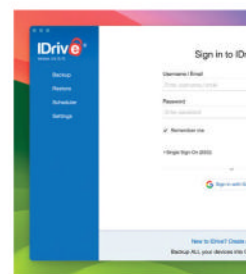


Backblaze

> About £7/month > backblaze.com



> **Backblaze** automatically backs up all files including documents, photos, music, movies and more to the cloud. Even if your computer and its drives are stolen or destroyed, your backups will be safe and accessible.

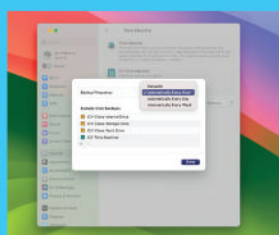


iDrive

> About £95/year > idrive.com



> **Another cloud backup service,** you can back up multiple devices to a single account, manage your data with a web interface and more. iDrive retains up to 30 different versions of a file too, so you can recover historical data.



Backup frequency

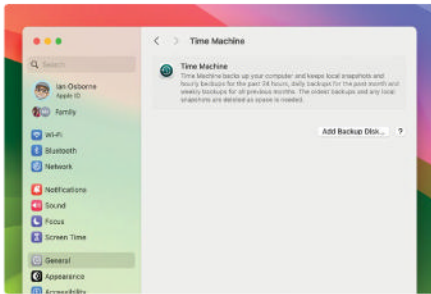


To change Time Machine's backup frequency, open System Settings and click on General in the left sidebar. In the right-hand pane, click on Time Machine, then Options. Choose how often backups are made from the Backup Frequency menu.

Incremental backups

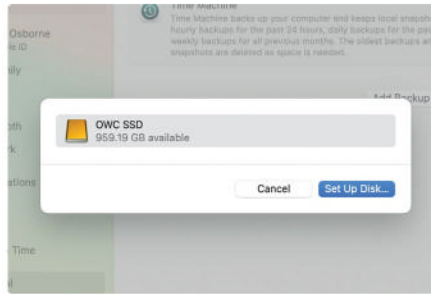
Modern backup apps offer incremental backups. This means after the first backup, only files and folders that are new or have changed are copied to your backup. The first backup takes a long time as all your data needs to be copied; after that, backups are much quicker.

How to Back up and restore with Time Machine >



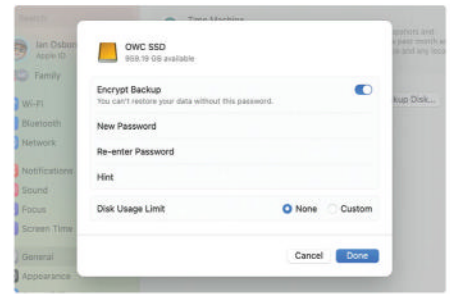
1 Plug in the drive

Plug in the external drive you're going to use for Time Machine. It will be wiped for the process, so make sure there's nothing on it that you need. Open System Settings from the Apple menu, and go to General > Time Machine.



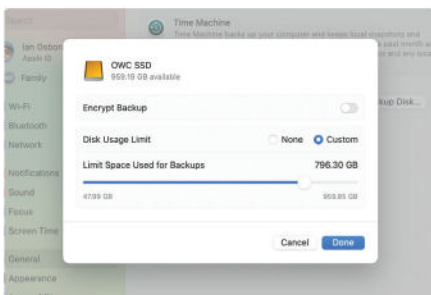
2 Choose a drive

Click Add Backup Disk. You'll see a list of connected drives available for Time Machine backups. Click the one you want to use, and then click Set Up Disk to proceed to the next step about choosing whether to encrypt it or not.



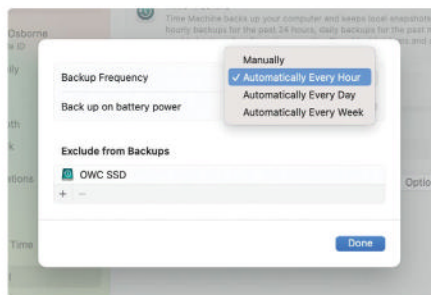
3 Encrypt your backup

If you want to encrypt your backup, add a password, retype that password, and add a hint. Encrypted drives require a password to access. If you don't want to encrypt, click the switch marked Encrypt Backup to turn encryption off.



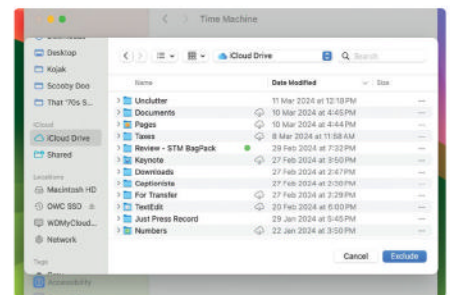
4 Limit backup space

Under Disk Usage Limit, choose Custom if you want to limit the amount of space your Time Machine backup can use on your drive. Never put data and its backup on the same drive, though, or both will be lost if the drive fails.



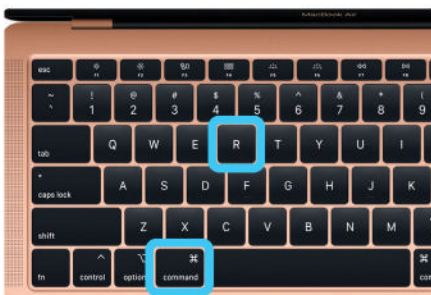
5 Start the first backup

When you're ready, click Done. The drive is prepared, and the first backup starts. You can click the Options button to change the frequency of future backups, which can be manual only, hourly, daily or weekly.



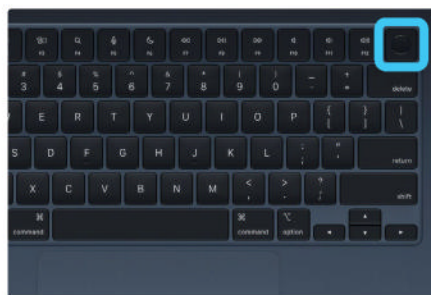
6 Exclude from backups

If you have files or external drives you don't want to back up with Time Machine, under Options, click the '+', navigate to the item you want to leave out and then click Exclude. To change your mind, click the '-'.



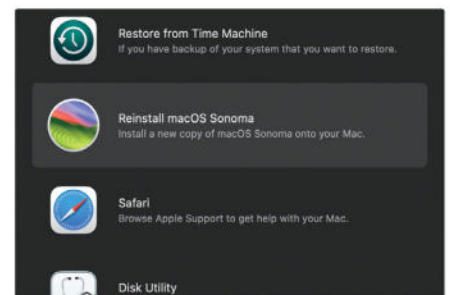
7 Restore (Intel Mac)

To restore your Mac from a Time Machine backup, you must enter Recovery mode. If it has an Intel processor, turn it off and press the Power button while holding Cmd+R. Release it when you see the Apple logo.



8 Restore (Apple silicon)

If your Mac has an Apple silicon chip, turn it off, then press and hold the Power button. Release the Power button as soon as you see the startup options on the screen. Now click Options to proceed to the next step.



9 Enter your details

Whichever processor you have, enter your username and admin password when asked to do so. From the Utilities list, choose the 'Restore from Time Machine' option and follow the on-screen instructions.

Help! I'm having iCloud issues

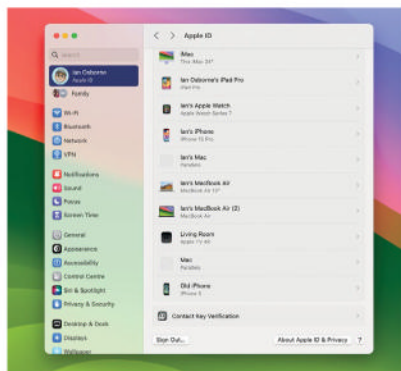
Like your Mac, iCloud just works, but some problems can occur



We all know iCloud is pretty reliable, but what can you do if files aren't syncing properly across your

devices? How do you cope if your iCloud storage is full? And what if you're receiving too much spam to your iCloud email account? None of these problems are insurmountable.

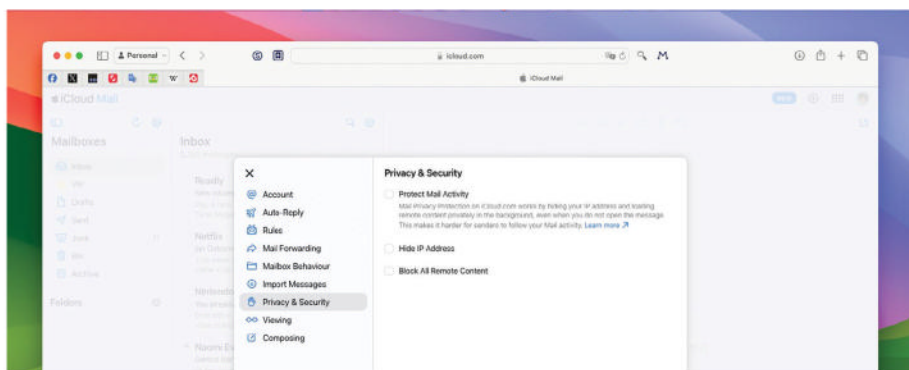
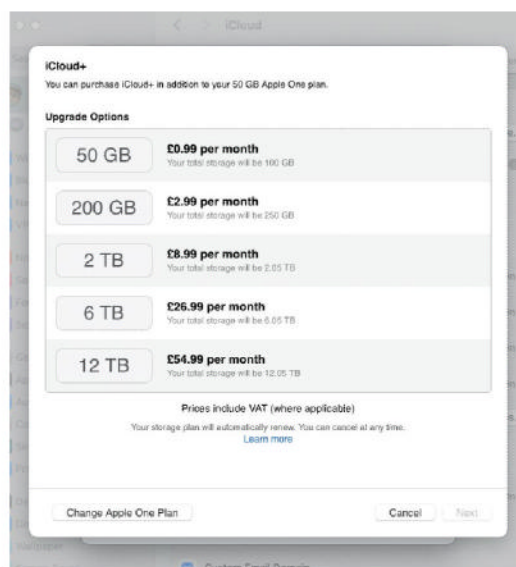
If you have issues with iCloud Drive not syncing reliably, for example, first of all try restarting your Mac. It might be as simple as that. Secondly, check the date and time are correct. If they aren't, go to System Settings > General > Date & Time. If it's set automatically, turn this off and on again. If not, correct it manually. Make sure you have enough space on your iCloud and also your Mac, as files are also stored locally. Finally, go to System Settings > Apple ID, and sign out then sign in again. Chances are one of these tips will solve your problems.



If your Mac's iCloud Drive isn't syncing properly, there are several tips to try, including signing out of your Apple ID and back in again.

I'm out of space on iCloud Drive

If you're out of space and you don't want to delete anything from your iCloud Drive, change your storage plan. Open System Settings, and navigate to Apple ID > iCloud. The graphic at the top of the window shows how much space you have and what is stored there. Click the Manage button, then Change Storage Plan; you can buy more storage for a monthly fee. Remember, a subscription to Apple One also includes iCloud storage.



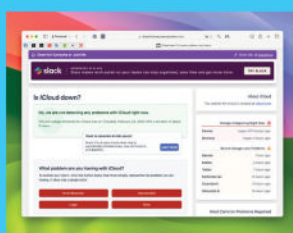
My iCloud email is getting spammed

In Mail, click Mail in the menu bar, then choose Settings, and turn on Protect Mail Activity. This works by hiding your IP address and loading remote content privately in the background, even when you don't open the message, making it

harder for senders to follow your Mail activity. You can also do this by going to icloud.com/mail; click the gear icon in the left-hand sidebar, choose Settings > Privacy & Security and turn on Protect Mail Activity here.

Is iCloud down?

Think there might be a problem with Apple's iCloud servers? Point your web browser at downforeveryoneorjustme.com, enter icloud.com in the search field and click the 'or just me?' button. You're told whether iCloud is down for everyone or only for you.



Where's my iCloud Drive?



iCloud Drive isn't in your Finder window's sidebar? To open it, click on the Desktop to bring Finder to the fore, click Go and choose iCloud Drive. If you want it back in the sidebar, click Finder in the menu bar, open Settings > Sidebar and tick its checkbox.

ON SALE NOW!



MACBOOK AIR M3 REVIEWED

T3
SMARTER LIVING

— INCREDIBLE —
TRAVEL TECH

STOP! Don't leave the house without these gadgets for every trip

NEXT-GEN EARBUDS
Thrill your ears with these fantastic-sounding buds

IN-DEPTH
THE FUTURE OF MOBILE TECH
The hottest on-the-go gear revealed, from phones to smart glasses

TESTED
NOTHING PHONE (2A)
Mid-range magician sets a new standard

RINGS OF POWER
These sensational smart rings are the ultimate health trackers

SO LONG, APPLE CAR
Why the EV's demise might be good for drivers

The image shows a large magazine cover for T3 magazine. The cover features a collection of tech gadgets including a laptop, earbuds, a suitcase, and various mobile devices. The headline 'ON SALE NOW!' is at the top. The main title 'T3 SMARTER LIVING' is in a red box. Below it, the subtitle '— INCREDIBLE — TRAVEL TECH' is in large black letters. A red banner says 'STOP! Don't leave the house without these gadgets for every trip'. The cover also features several article teasers: 'MACBOOK AIR M3 REVIEWED', 'NEXT-GEN EARBUDS', 'IN-DEPTH THE FUTURE OF MOBILE TECH', 'TESTED NOTHING PHONE (2A)', 'RINGS OF POWER', and 'SO LONG, APPLE CAR'. A tablet on the right displays the same magazine cover.

Available at WHSmith,
or simply search for 'T3' in your device's App Store

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Help! My network won't work

Is your Mac having trouble on your home network? Try these tricks

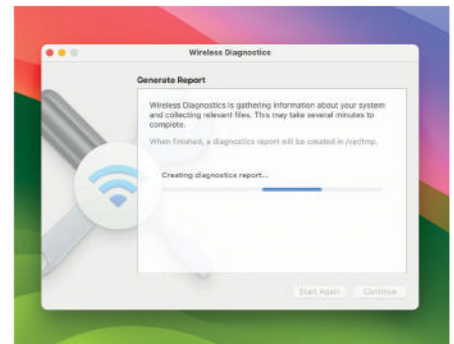


These days, we rely on our home networks more than ever, especially when working wirelessly, remotely or from home.

Macs are easy to connect to home networks with Wi-Fi, but you can still encounter problems. Here we explore some of the more common issues, what you can do to identify and address them and how sometimes switching things off and on again is the only thing that works. Seriously. If you can't get on to the internet, or communicate with other

devices on your network, your first step should be to turn off the router, count to 20 and turn it on again. You'll be amazed how often this solves the problem.

Another thing to try early on is Apple's Wi-Fi Diagnostics. Quit all open apps. Press and hold Option on your keyboard, and click the Wi-Fi icon in the menu bar. The menu that appears is larger than the one you get if you click the icon without holding Option. Choose Open Wireless Diagnostics, and follow the on-screen instructions for a complete diagnostic of your network.



If turning your router and your Mac off and then on again doesn't work, try running macOS' built-in diagnostics to find where the problem is.

5 best Wi-Fi routers >



AVM Fritz!Box 7590

> About **£285** > en.avm.de
> **An awesome and feature-packed ADSL router.** It features Wi-Fi 6, four Ethernet ports, two USB ports and support for up to six wireless DECT phones. If you have full fibre broadband, you can connect it to your fibre modem too.



Asus ZenWiFi AX (XT8)

> **£234.99** > asus.com/uk
> **With wireless coverage of up to 230 square metres, this router should get you connected all over the house.** Available in black or white, it comes with Wi-Fi 6, very fast speeds and excellent security features. Definitely worth considering.



AVM FRITZ!Box 5590 Fibre

> About **£285** > en.avm.de
> **This solid, dependable fibre optic router can replace the router and modem for your full fibre connection.** Although only if your ISP allows the use of third-party modems. It offers Wi-Fi 6, a DECT telephone system and more.



Google Nest Wifi Pro Two-Pack

> **£370.69** > store.google.com/gb
> **The Nest Wifi Pro gives you a smart speaker, Wi-Fi router and extender in one.** It's fast, and features simple controls, but only two Gigabit Ethernet ports (on the router). It's just the thing for your Google smart home.



TP-Link Archer AX10000

> **£693.03** > tp-link.com/uk
> **If you want the ultimate tri-band wireless gaming router, check this out.** It's not cheap, but it offers ultra-fast Wi-Fi, and a Game Accelerator to identify and optimise gaming streams. A separate modem is required with most ISPs.

Get a repeater

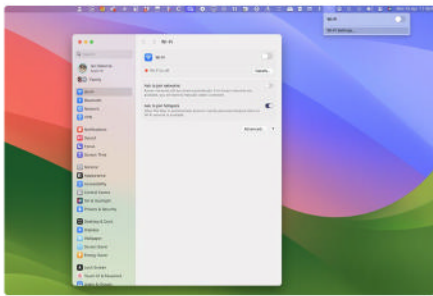
If your Wi-Fi coverage doesn't reach the furthest corners of your house, get a repeater (or an extender). It connects to your router and repeats/extends your network's reach by offering another wireless access point. The one shown here is an AVM FRITZ!Repeater 6000.



Join a hidden network

If you can't see a Wi-Fi network, it may be hidden. To connect to it, click the Wi-Fi icon in the menu bar and select Other Networks. Type the network's name when prompted, then choose the type of security it uses. Finally, enter your login details and click Join.

How to Identify and fix Wi-Fi issues >



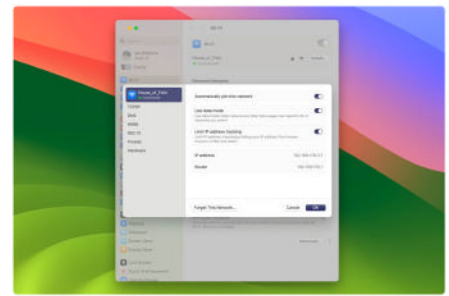
1 Mac won't connect

If your Mac won't connect to your network, try turning Wi-Fi off then on again. To do that, click the Wi-Fi icon at the top right of the menu bar, and use the switch at the top of the menu. Or do so from System Settings > Wi-Fi.



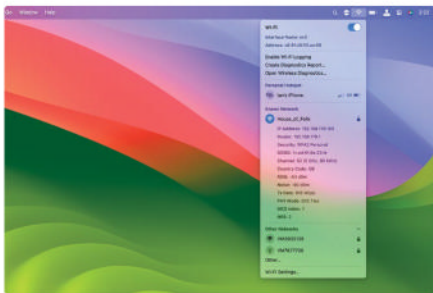
2 Restart your router

If this fails to sort things, it might be that your router has glitched or crashed. Unplug the router, and wait around 60 seconds, then plug it in again. Give it time to reboot, then see if you can connect to Wi-Fi as normal.



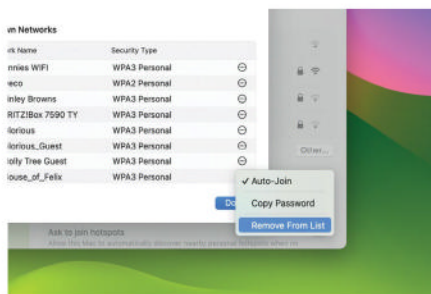
3 Low data mode

If you're using a Wi-Fi network for which you have to pay according to how much data you use, Low data mode can help cut the bill. In System Settings > Network > Wi-Fi, click Details and switch on 'Low data mode'.



4 Network information

Hold the Option key down and click on the Wi-Fi icon again for a large information window that tells you a lot about the network on which you've connected, including the IP address, security and more.



5 Delete networks

Open System Preferences and click on Wi-Fi. Click Advanced at the foot of this window to see a list of the networks you've previously connected to. To delete one, click the '...' icon alongside it and choose Remove From List.



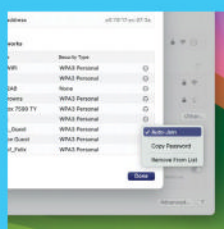
6 Test your speed

If you want to test the speeds you're getting from your ISP, download the Speedtest by Ookla ([speedtest.net](https://www.speedtest.net)). It's free, and easy to use; just click Go and your upload and download speeds are measured and the results shown.

Don't automatically join



You might want to keep a network on your list of previously joined networks but not automatically join it again when you open your Mac within its range. Open System Settings, click Wi-Fi in the sidebar, then Advanced. Find the network, click '...' and untick Auto Join.



Personal hotspots

If your regular internet connection is unavailable on your Mac, try using your iPhone instead. To do that, click the Wi-Fi icon on your Mac's menu bar and select your iPhone under Personal Hotspot. Use it selectively, though, as you don't want to end up with a hefty phone bill.

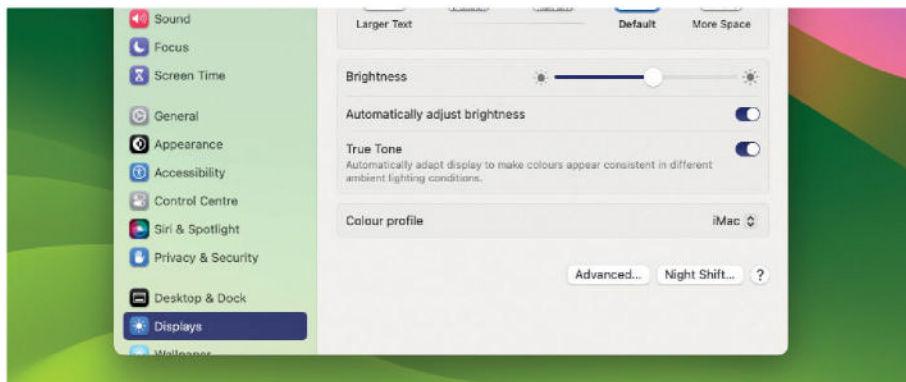
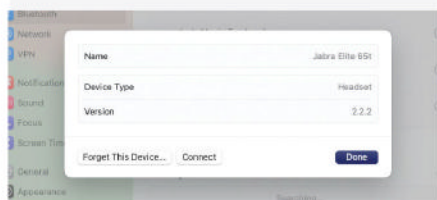
Help! My accessories won't work

Hardware peripherals can cause issues. Here's how to fix your kit

Fix Bluetooth peripheral issues

If your Bluetooth peripheral won't connect to your Mac, turn it off and turn it on again. If that fails, click the Bluetooth icon in your Mac's menu bar, then click the peripheral name in question to see if you can connect it that way. If this doesn't work, in the same menu, select Bluetooth Settings at the bottom. This opens System Settings, with Bluetooth already selected. Click on the 'i' icon next to the device in question, and then click Forget This Device. Your Mac and the device are no longer paired. Pair it again (dig out its instructions if necessary).

As your keyboard and Magic Trackpad or Magic Mouse are likely Bluetooth peripherals, it's a good idea to keep a cheap USB mouse and keyboard handy in case you have problems with these input devices. You can pick them up extremely cheaply from charity shops or from car boot sales, and they can be lifesavers if your regular keyboard or mouse/trackpad glitches.



Fix external display issues

If you're having problems with your external displays, check the cables are correctly connected. If they are, unplug and reconnect it. The next step is to open System Settings, and click Displays on

the left. Hold the Option key and the Night Shift button turns into Detect Displays; click it and see if it appears. You can also click Arrange to set where the screens are in relation to each other.



Fix common printer problems

If you're struggling to get something printed, check the printer is switched on and correctly plugged into your Mac or connected to the same Wi-Fi network, check it has paper! Next, click

the printer icon in your dock to see the print queue. If there's more than one printer on your network, check you're printing from the one you intended. Click 'X' to delete a job from the queue.

Mouse/trackpad settings



Open System Settings, and in the left sidebar, click Mouse or Trackpad. You can then customise the way it works. If your Gestures have gone awry, make sure they're set up correctly. If the pointer is moving too quickly or slowly, change the tracking speed.



Displays and M-series chips

If your Mac has a regular Apple silicon M-series chip (as opposed to a Max, Pro or Ultra), you can only connect up to one external monitor natively. If you're trying to connect a second and failing, this is probably why. OWC makes an adaptor that can get around this limitation. See bit.ly/3IJhrR6 for details.



My keyboard's in the wrong language

When you press the 'y' on your keyboard, do you get a 'z' instead?

If so, it could be set to German.

Other language settings can cause similar quirks. Go to System Settings > Keyboard. Under Languages, make sure

it's set to English (United Kingdom), or the option you want. If it isn't, click Edit and check the correct box, and uncheck the incorrect ones. If your keyboard isn't recognised, click Change Keyboard Type and follow the instructions.



My USB peripheral isn't showing up

Today's Macs mostly offer USB-C ports, but many peripherals still use USB-A connectivity. If you have a USB-A gadget and only USB-C ports free on your Mac, you can get an adaptor fairly cheaply. Alternatively, use a USB

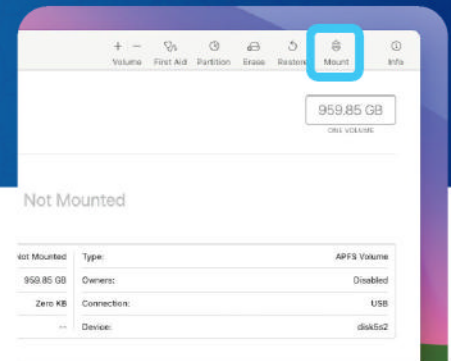
hub, which plugs into one USB socket and offers several USB-A ports. If a USB peripheral plugged into your hub isn't found by the Mac, try a different port and failing that, try plugging it into the computer instead of the hub.

My USB accessory is disabled

If you keep getting this notice, the device might be drawing too much power. Is it a mains-powered device? If so, make sure it's plugged into the mains as well as your computer. If it's connected to a hub, try connecting it directly to your Mac.

My speaker won't work

First check the connections, Bluetooth or cabled. Remember, there's usually more than one volume control in operation. Make sure your Mac's volume isn't all the way down to nothing; click the speaker icon in the menu bar. Now check the volume on the app you're using, and finally, the speaker's own volume.

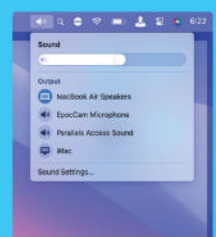


Fix common external drive problems

If an external drive doesn't show in Finder, make sure you've given it enough time - wait a minute before trying anything else. After that, try a different USB port, ideally in the computer itself instead of a hub. Try a different USB cable too.

Open Disk Utility from Applications > Utilities. Look in the list of external drives in the left-hand sidebar. Is it there? If so, click the chevron to its left. If you see the volume you're looking for greyed out, try clicking on this greyed-out volume, and then click 'Mount' in the toolbar.

If it appears in Disk Utility but you can't use it for some reason, click on it and then click Erase in the toolbar. Choose a name for it, and under Format, choose APFS, then click the Erase button. If you've just bought the drive, it might not be readable as it's formatted in a way the Mac can't understand. Erasing it in this way reformats it to your Mac's preferred format, but also wipes it clean so make sure there's nothing on it that you need.



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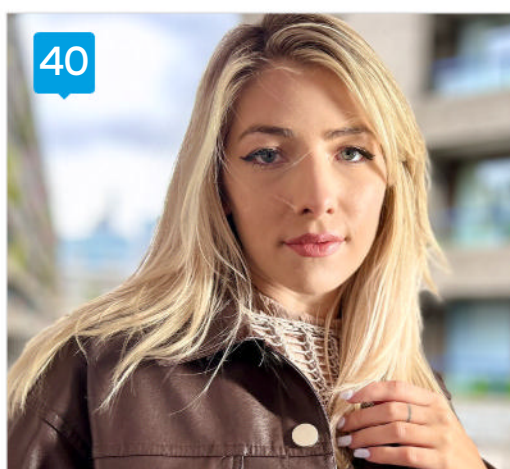
macOS

- > **Cmd** is the Command key.
- > **Alt** or **Opt** is the Option key.
- > **Ctrl** is the Control key, also shown as '^' in shortcuts in the menu bar.
- > The thick, outlined up arrow is the Shift key.
- > The thin, left arrow or outlined pointer with 'X' inside is the Delete key, which deletes to the left. Pressing the Function key (Fn) and the Delete key deletes to the right.
- > The thin, right arrow key with a small vertical line at the end is the Tab key, which shifts the focus between *some* controls.

iOS

- > A **tap** is a brief contact of (usually) one finger on your device's screen.
- > To **drag** is to move a finger across the screen to scroll or pan around content.
- > **Swipe** means move one or more fingers across an item or the screen, then let go.
- > A **flick** is like swiping, but it's quicker, and is often used to scroll content more quickly.
- > **Pinch** means move two fingers together or apart, usually to zoom in or out.
- > **Touch and hold** means lightly rest your finger on an item and wait for a reaction.

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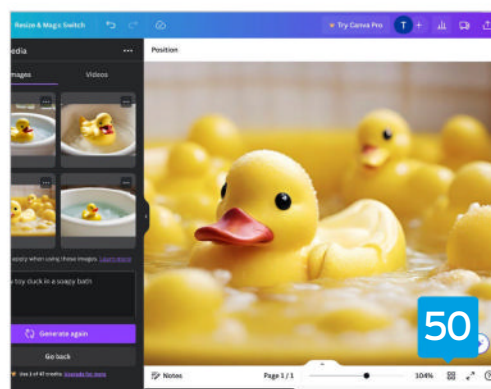
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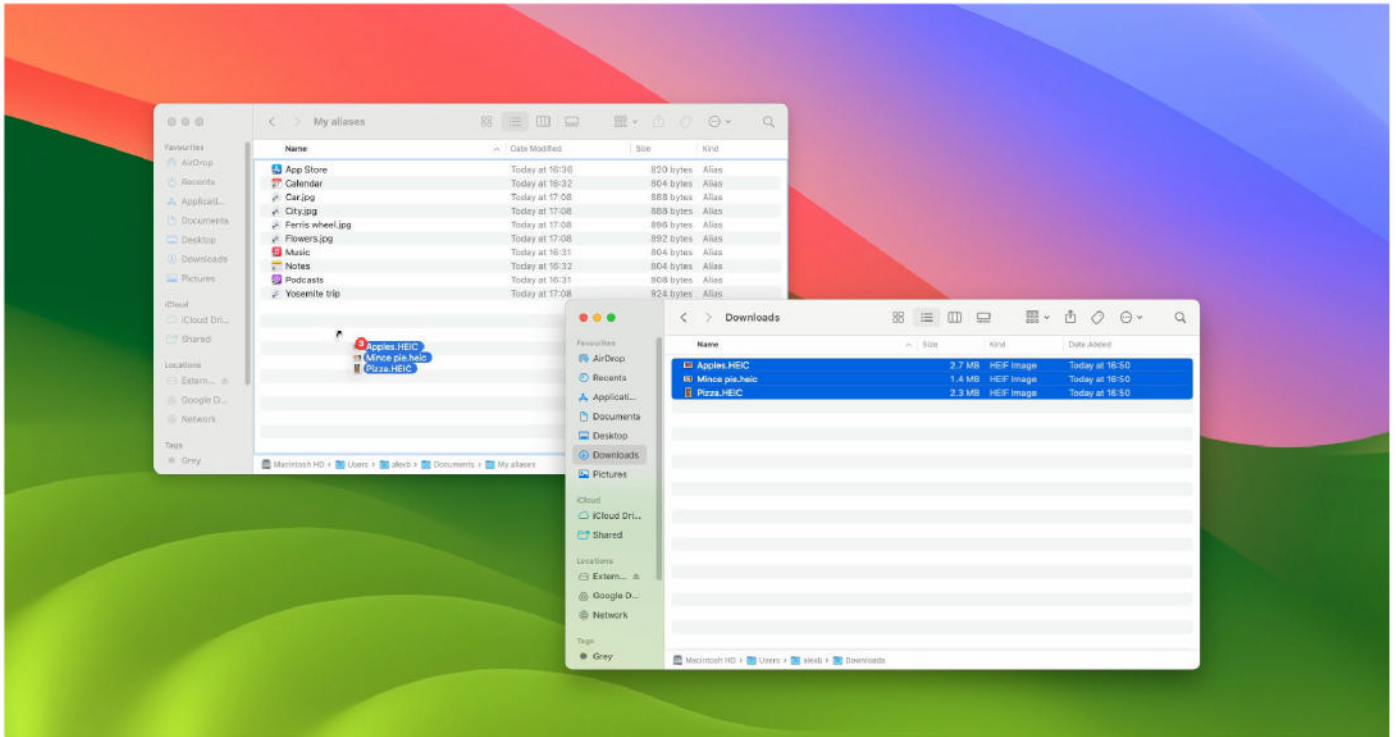
- > Team your iPhone 15 with loads of add-ons



50



52



Make and use aliases on Mac

Create handy shortcuts to your favourite files, folders and apps

IT WILL TAKE

> 5 minutes

YOU WILL LEARN

- > How to create aliases for files, folders and more on your Mac

YOU'LL NEED

- > Files, folders or apps that you want easy access to



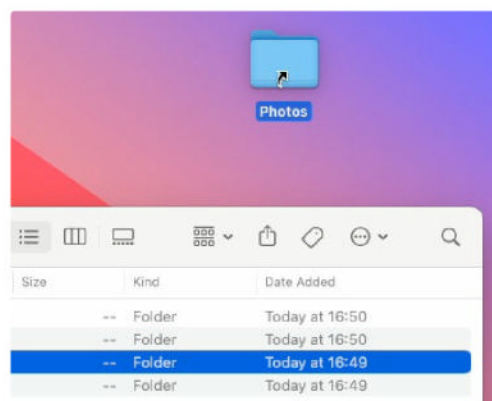
Genius tip!

- > When creating an alias, your pointer should turn into a curved black arrow as you drag the file or folder. If not, you're just moving an item.



There will probably have been times when you've wanted to access a file or folder on your Mac without having to rummage around inside your computer to locate it. On occasions like that, aliases can be invaluable.

In short, an alias provides a shortcut to an item on your Mac. So, you could store a group of files inside a folder in your Documents



Look out for the curved black arrow as you drag an alias, visible both when creating one and after it has been made. This distinguishes aliases from regular files and folders.

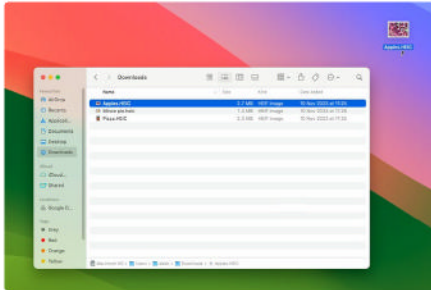
folder, then create an alias of that folder on your desktop. Open the alias and you'll be taken to the original location, with all the proper files in place. This is useful if you want to keep files in their original place while still having an easy way to access them. It also means there's no need to duplicate files and folders and lose storage space on your Mac as a result.

Many advantages

You can create aliases of files, folders, apps and drives, and they're easily identified by the small black arrow in their bottom-left corner. One benefit of aliases is their flexibility - once you've created one, you can rename it or move it to another location and it will still work as expected. You can also move the original file (that is, the one that the alias links to) and the link will remain intact, so there's no need to worry about breaking aliases by changing them.

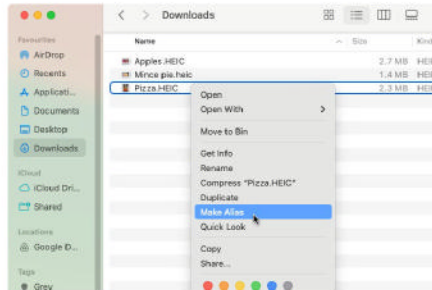
The ease of use belies the utility of an alias, and they can be deployed in all sorts of ways. Let's get started and see just what they can do. **Alex Blake**

HOW TO Make and use aliases on your Mac >



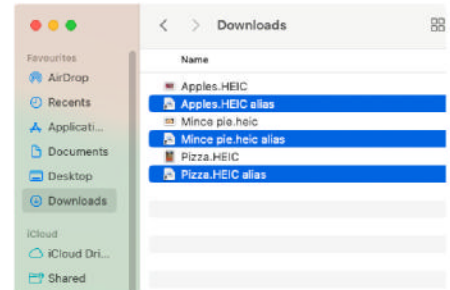
1 Drag and drop

To create an alias, hold the Cmd and Opt keys, then drag an item to a new location. For instance, you could drag a file from the Downloads folder to the desktop and an alias is then created at that destination.



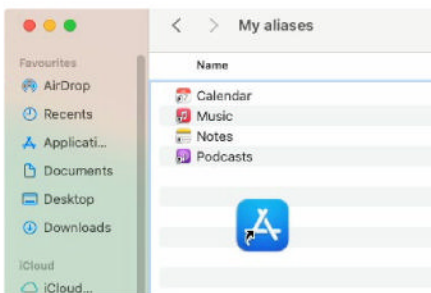
2 Other methods

Alternatively, pick a file in Finder, then select File > Make Alias. Or Ctrl-click it and choose Make Alias, or select the item and press Ctrl+Cmd+A. These methods create an alias inside the original file's folder.



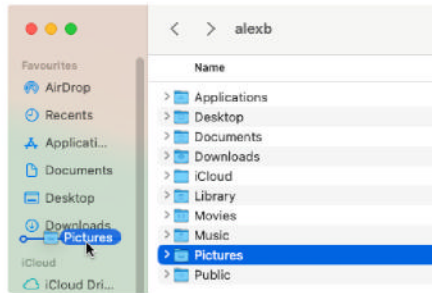
3 Make a group

There's no need to create aliases one by one. You can select a group of items, then use one of the above methods to create multiple aliases at once. You can then save time by moving them all together if you want.



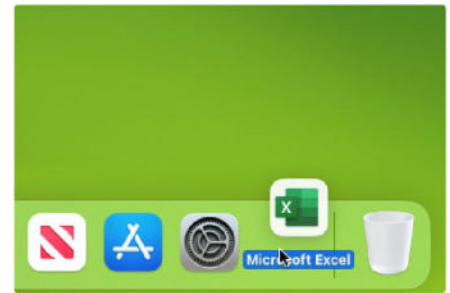
4 Dock aliases

You can also create an alias from items in your Mac's Dock. The process is very similar; hold Cmd+Opt, then drag the file from the Dock to a location in Finder. This works for apps as well as files and folders.



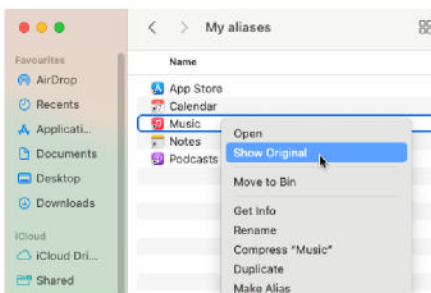
5 Finder sidebar

Aliases can be added to the Finder sidebar or the Dock for quick access. For the former, drag the item to the Favourites section in Finder's sidebar. For the latter, just drag the original item onto the Dock.



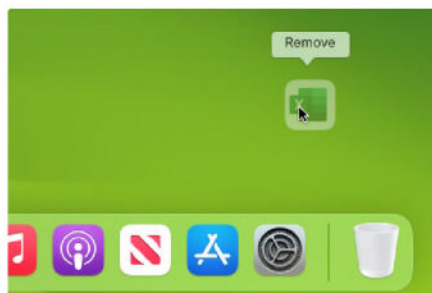
6 The dividing line

Note that when you add aliases to the Dock, app aliases should be dropped to the left of the divider that separates recently used apps. File and folder aliases should be dropped to the right of the divider.



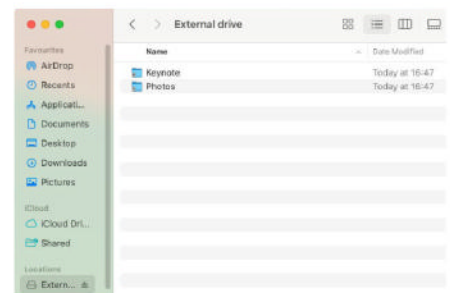
7 Show original

To open an alias's original folder, Ctrl-click an alias, then select Show Original. For aliases in Finder's sidebar, Ctrl-click and choose 'Show in Enclosing Folder', or pick Options > 'Show in Finder' for Dock aliases.



8 Removing aliases

It's safe to remove aliases - the original item won't be affected. Remove aliases from the Finder sidebar or the Dock by dragging them out until you see the word Remove or an 'X' icon appear next to the item, then let go.



9 External drives

Avoid using aliases with removable drives. If you disconnect the drive, the alias may no longer work because its connection to the original file has been severed. Try to keep aliases and targets on the same drive.



Improve your images with AI

How to use AI tools to make photo fixes and creative adjustments

IT WILL TAKE

> 15 minutes

YOU WILL LEARN

> How to try out AI photo editing with various software

YOU'LL NEED

> Adobe Photoshop 2024, macOS 10.14 or later



AI - artificial intelligence - is changing the way we edit photos.

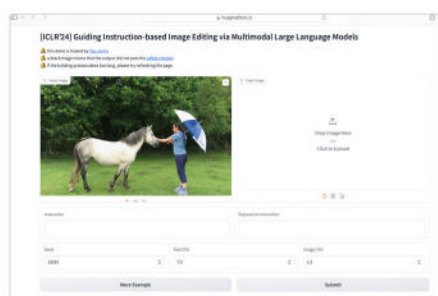
For example, Adobe Photoshop 2024 uses its Adobe Sensei AI tool to perform common photo fixes - such as removing unwanted background objects from a photo or making a pouting model smile. And Apple are developing an AI tool called MGIE. This is a Multi-modal Large Language Model (MLLM) that turns written prompts into edits. For example, you can type 'change hair colour from blonde to pink',

and the code will apply that command to a photo. However, while hair colour may be changed the code tends to replace subject's faces with less than flattering eyes and teeth.

While Apple's AI tool is still in development, Adobe have been evolving their Adobe Sensei AI tool for years, and we'll put Photoshop's AI features through their pixel-pushing paces. But we'll kick off by experimenting with a browser-based demo that lets you use text prompts to get Apple's MGIE AI code to edit your photos.

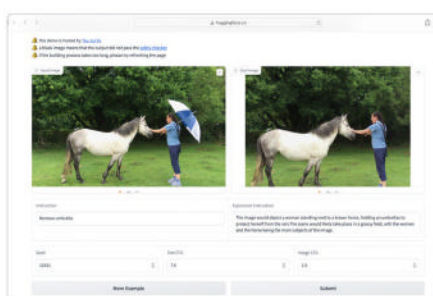
George Cairns

HOW TO Experiment with Apple's AI tool >



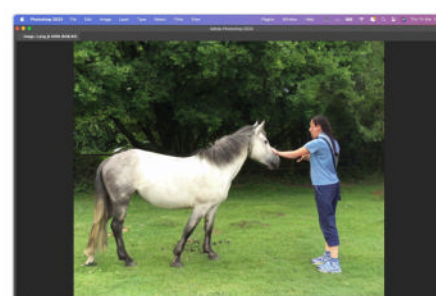
1 Upload image

In Safari, go to <https://huggingface.co/spaces/tsujufu/ml-mgie>. Click on the input image panel and browse to a photo that you want MGIE to fix. In our example, we want to remove the distracting umbrella from the scene.



2 Type a prompt

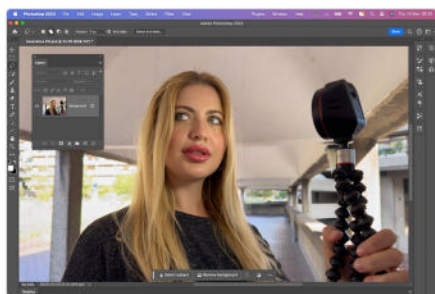
In the Instruction panel, type a command such as 'Remove umbrella'. Click the Submit button. MGIE will then analyse the image and attempt to carry out your command by editing the appropriate pixels in the picture.



3 Check results

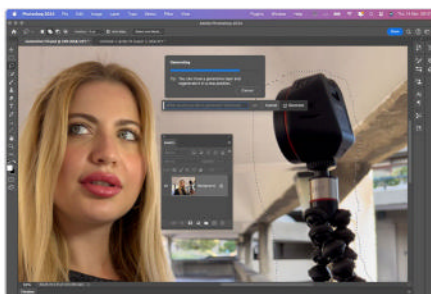
MGIE has done a reasonable job of replacing the umbrella with appropriate background details. However, it has distorted the woman's face. It has also missed the umbrella's handle and cropped the edges of the image.

HOW TO Use Adobe's Generative Fill command >



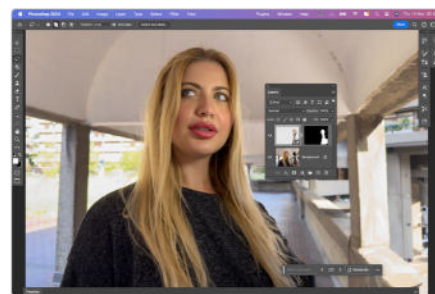
1 Unwanted objects

We could use Photoshop's Clone Stamp tool to manually replace the unsightly LED light (and the subject's hand) with background pixels but this would take a long time due to the complex architecture behind the girl.



2 Lasso and generate

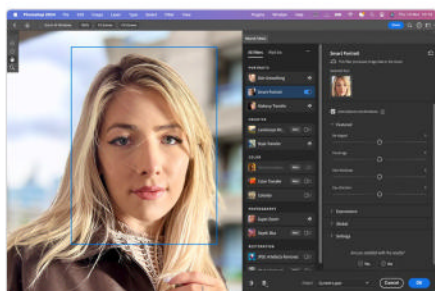
Use the Lasso tool to draw a rough outline around the unwanted objects. The Generative Fill panel appears. Click on Generative Fill. Leave the text field blank. Click Generate. AI will analyse the background pixels.



3 Choose a variation

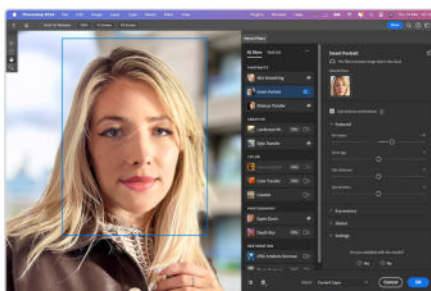
A Generative Fill layer will appear containing new pixels based on the surrounding architecture. In the Generative Fill panel, you can toggle between three versions to choose the most effective AI-generated patch.

HOW TO Use Neural Filters in Photoshop >



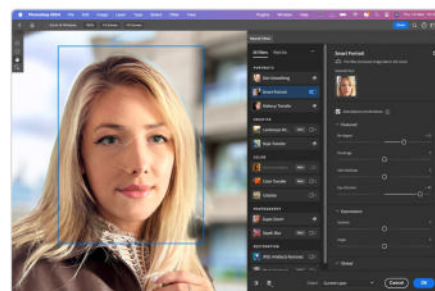
1 Try a neural filter

If you feel that your subject looks a bit too enigmatic and you want to introduce a bit more of a smile, open a shot in Photoshop 2024 and choose Filter > Neural Filters to access creative AI-powered tools.



2 Say 'cheese!'

In the Neural Filters workspace toggle on the Smart Portrait option. Drag the 'Be Happy' slider right to add a smile to your subject but don't go too far or you'll get a set of unconvincing computer-generated teeth!



3 Strike a pose

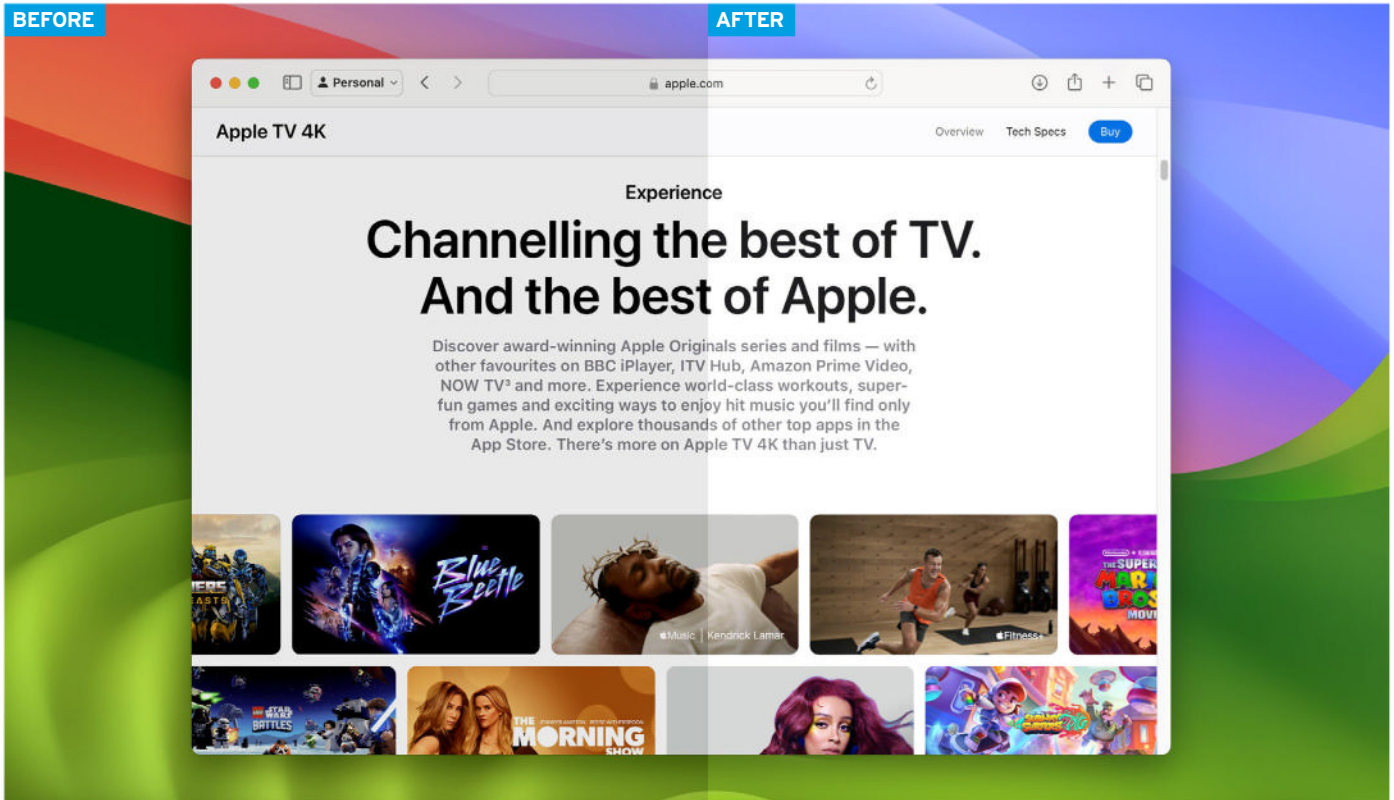
You can get your model to turn their head and look away from the camera using the Head and Eye Direction sliders, but don't push things too far or the results will be less convincing, especially if the eyes are replaced.



Go further with AI

Bring new elements in to your images >

In our walkthrough, we used Photoshop's Generative Fill tool to replace a distracting LED light with appropriate bits of background buildings. You can alter your photo in a more creative way by generating new objects to replace existing ones. Here we drew a rough outline around our subject's leather jacket with the Lasso tool. We then typed the prompt 'Change jacket to denim' into the Generative Fill text field. We then toggled between three different attempts to replace the leather jacket to choose the most convincing variation.



Boost your display brightness

Let Vivid help you to see the light on your HDR-compatible Mac

IT WILL TAKE

> 5 minutes

YOU WILL LEARN

> How to raise your Mac's brightness for consistent HDR visuals

YOU'LL NEED

> Vivid app ([getvivid.app](#)), macOS 12 or later



Modern Mac displays can go super-bright, but only when HDR content is involved.

Fortunately, you can get 1,000 nits of brightness whenever you want by using an app called Vivid.

Vivid uses your Mac display's HDR capabilities to push its brightness beyond its normal bounds. This is great for when you need to use a MacBook outside in bright

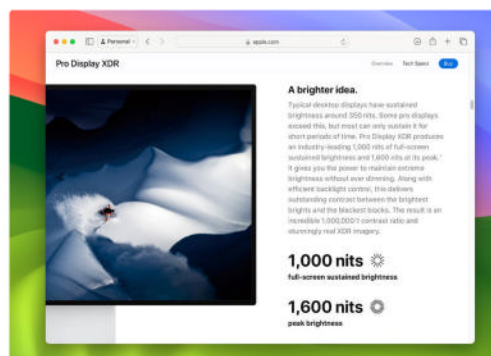
sunshine, or if you want a better movie-watching experience, even if the content is not in HDR. It works using your standard brightness keys – except they go twice as bright. It also comes with extra features like customisable shortcuts and a setting that shuts off Vivid if your battery is low.

Modern Macs only

Vivid only works on modern Macs with HDR support, such as the M1, M2 and M3 series MacBook Pro (except the M1 13-inch model) and the Pro Display XDR monitor. You can pair other Apple silicon Macs with a Pro Display XDR and Vivid will work (Apple says the Pro Display XDR can run at 1,000 nits indefinitely, so it's safe to use), but it's not compatible with any Intel Mac or the Studio Display.

Vivid is free to try with limited functionality and costs €10 (about £10) on the company's website or £24.99 on the Mac App Store if you want to unlock it. This is a one-off fee, not a subscription. Now, let's see what it can do.

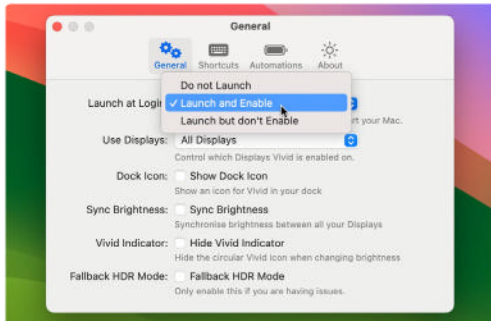
Alex Blake



Any Mac or Apple monitor with XDR should work with Vivid, but third-party monitor support isn't yet available.

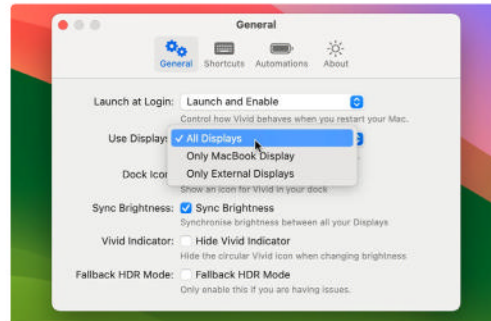
You can get 1,000 nits of brightness by using Vivid

HOW TO Boost your display brightness >



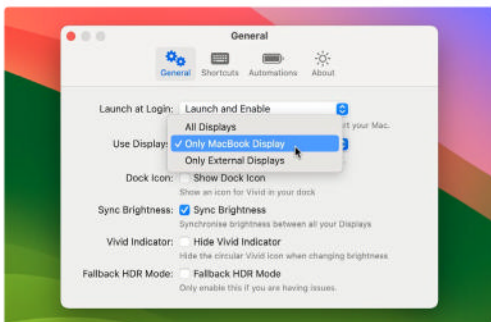
1 Launch at login

Vivid automatically brightens your display when it runs. To have it start when you log in, click its menu bar item, then go to Preferences > General and pick 'Launch and Enable' from the 'Launch at Login' menu.



2 Adjust multiple displays

If you have several compatible displays, Vivid can work across them all. Open Vivid's preferences and go to General > Use Displays and select All Displays from the menu, then tick the checkbox next to Sync Brightness.



3 Choose separate screens

If you'd rather have different settings for your external displays compared to your Mac's built-in screen, open Vivid's settings and go to General > Use Displays and pick Only MacBook Display or Only External Display.



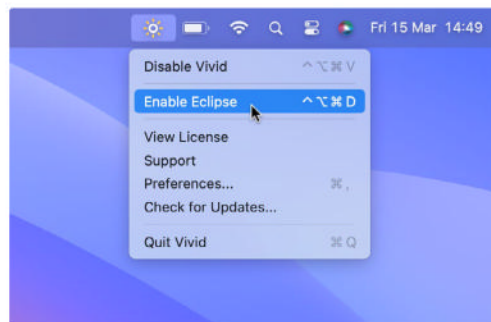
4 Save battery life

To save battery life, open settings and go to Automations, then tick the checkboxes next to Battery and Low Power Mode. You can define what battery percentage threshold will turn Vivid off in 5% increments.



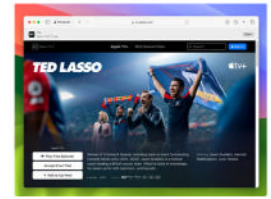
5 Run a timer

You also can disable Vivid after a set period of time in Preferences > Automations. This is useful if you just want to enable it during a game or movie session but think you might forget to turn it off when you're done.



6 Enable Eclipse mode

Vivid isn't just for *increasing* your display brightness - you can lower it too. Click Vivid's menu bar icon, then select Enable Eclipse. You can now lower your display's brightness below its normal minimum boundary.



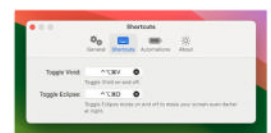
Jargon buster

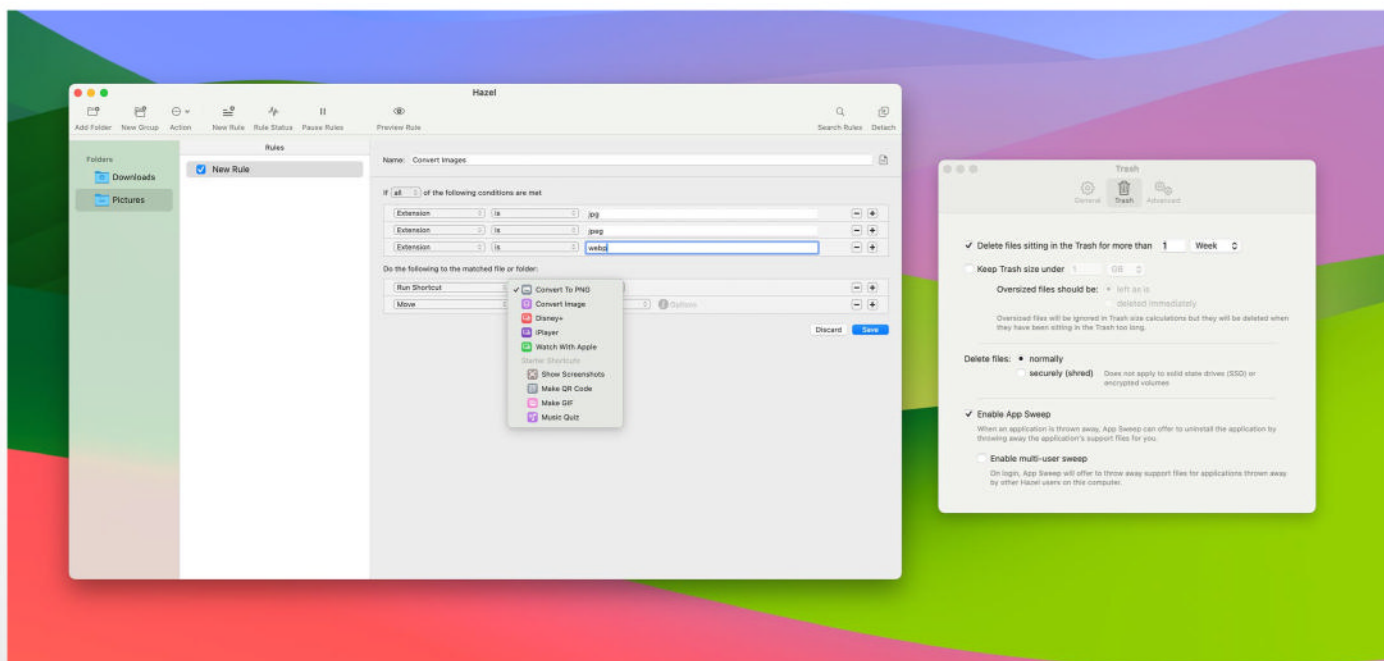
> **HDR** stands for high dynamic range. It refers to content that has a higher range of brightness levels than regular visual material.



Genius tip!

> Go to the app's settings and select Shortcuts. Here, you can set a keyboard combination to quickly toggle Vivid or its Eclipse feature.





Clean up your Mac with Hazel

Bring order to chaos with this amazing rules-based Mac utility

IT WILL TAKE

> 20 minutes

YOU WILL LEARN

> How to keep your Mac neat and tidy - automatically!

YOU'LL NEED

> macOS Sonoma, Hazel (\$42, about £40, noodlesoft.com)



If your Mac's messier than a teenager's bedroom after a wild weekend sleepover, it may be time to call in a supernanny - and that's where Hazel comes in.

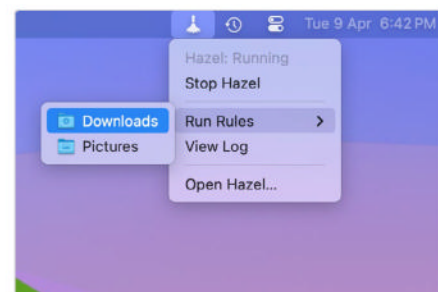
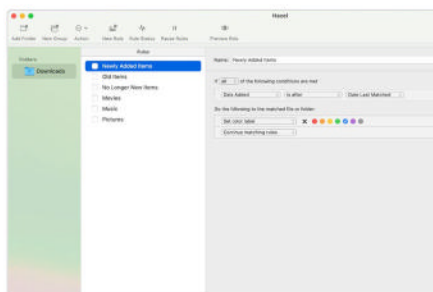
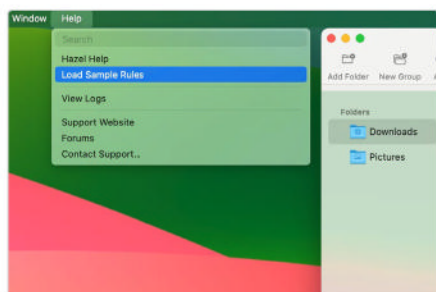
Now on Version 5, this brilliant utility from Noodlesoft will help tidy up and then keeps things tidy, thanks to its straightforward interface and powerful condition-based rules.

Hazel can come to the rescue in all kinds of ways - whether it's clearing up a particularly messy desktop, fetching and carrying images,

video and music files and putting them in the proper places, or even sweeping away the detritus left behind by uninstalled apps.

Plus, Hazel can work with other automation apps on Mac such as, ahem, Automator and Shortcuts to quickly handle things like file conversions (JPGs to PNGs, say) and do so automatically. Here we look at just some of the things that Hazel can do - but be sure to check out Noodlesoft's support pages at noodlesoft.com/support for more tips and ideas. **Rob Mead-Green**

HOW TO Get organised with Hazel >



1 Rule-based organisation

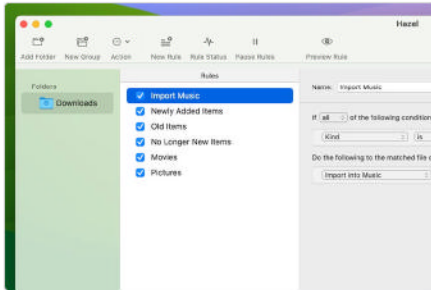
Hazel uses rules like those you might find when creating smart playlists in Music or filing emails away in Mail. To help you get started, Hazel will offer to load some demo rules when you first launch the app. Take a look.

2 Put rules into action

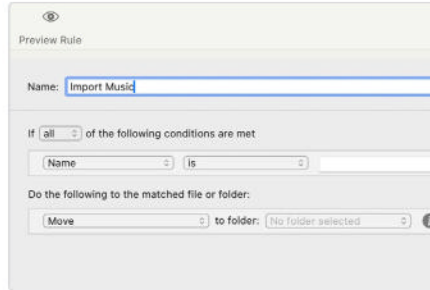
Click on any of the existing items in the rules list to see the commands they contain. The Newly Added Items rule, for example, automatically adds a Blue tag to any new items you've added to your Mac so you can find them more easily.

3 It's automagic!

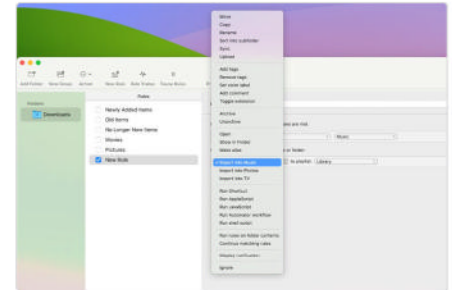
Any rules you add to the list and run will be carried out automatically by Hazel. The app window doesn't need to be open for it to do so. You can also manually run rules at any time by using the drop-down in Hazel's menu bar item.

CONTINUED... Get organised with Hazel >

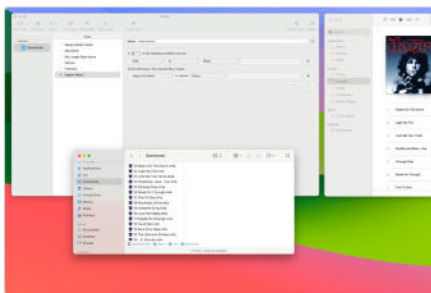
4 You make the rules Once you've tried the demo rules, you can either customise them to suit you, or add new rules of your own. Here we're going to create a rule that will automatically add music files contained in our Downloads folder to the Music app.



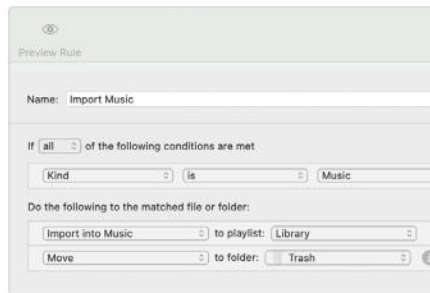
5 Create the rule First click Add Folder - this tells Hazel which folder on your Mac it should watch so it can apply the rule. Then give your rule a suitable name - we're calling this one 'Import Music'. Next, start adding any conditions to your rule.



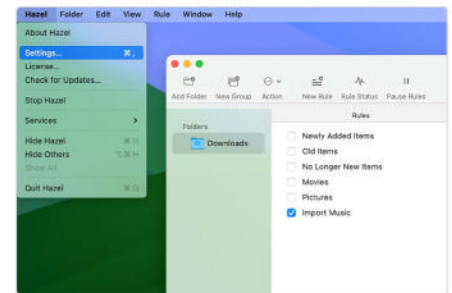
6 Conditions and actions The first line says 'If all the following conditions are met'. Here, the condition we're adding is 'Kind is Music'. Next, add an Action. Under 'Do the following to the matched file or folder', choose 'Import files into Music to playlist Library'.



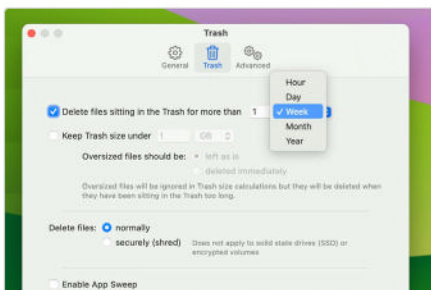
7 See the rule in action Once you've added conditions and actions to your rule, click Save. Hazel should then run the rule automatically. From now on, any music files you add to your Downloads folder will be imported into the Music app with no input from you.



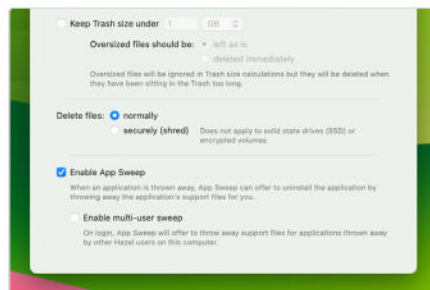
8 Customise the rule The Import Music rule you created may have added the files to the Music app, but it's also left the originals in place. To remove those originals, you may wish to add a further Action to your rule. In this case, 'Move to folder Trash'.



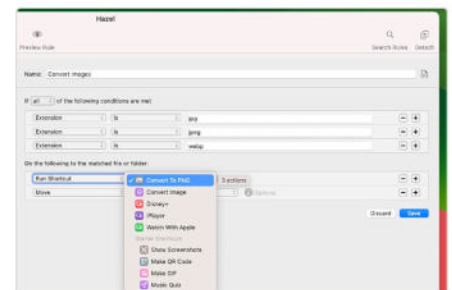
9 Head to settings Now when you add a music file to your Downloads folder, Hazel will first import them into the Music app, then move the originals to the Bin, so you can delete them later. But if that still seems messy to you, head to Hazel > Settings.



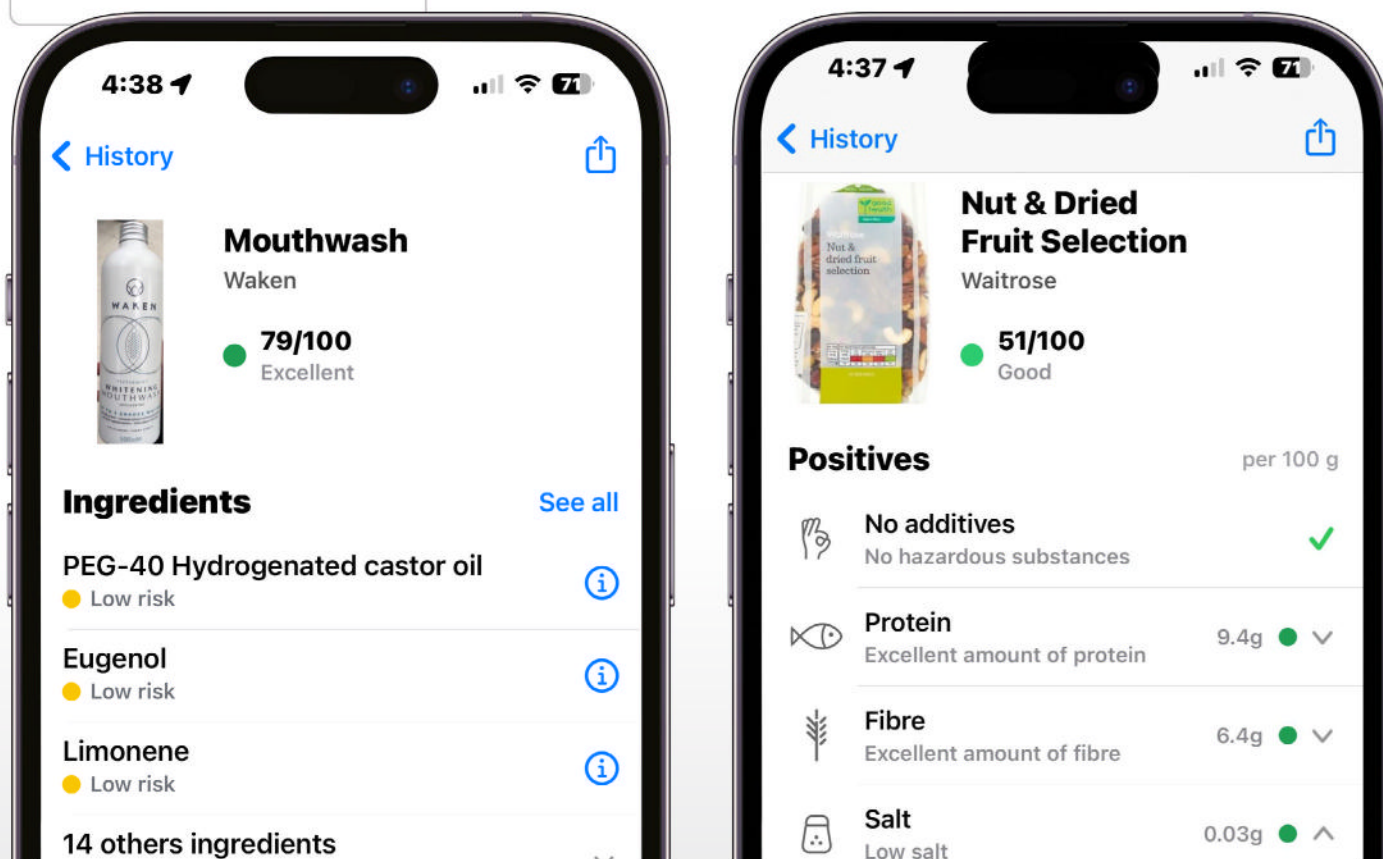
10 Take out the trash In Hazel > Settings, select Trash in the toolbar then select the 'Delete files sitting in the Trash for more than' and add a suitable time period. Here we've chosen '1 Week'. You can also choose to delete files normally or securely.



11 Let's get sweeping Still in Hazel > Settings > Trash, select Enable App Sweep at the bottom of the window. This automatically cleans up any leftovers when you remove an app from your Mac - if only those messy teenagers would do the same, eh?



12 Add a shortcut Hazel also plays nicely with the Shortcuts app. Here we've created a rule that watches for images containing .jpg, .jpeg and .webp extensions and converts them to PNG files before binning the originals. It's amazing what you can do!



Make healthier choices

Use your iPhone to scan barcodes for useful shopping advice

IT WILL TAKE

> 10 minutes

YOU WILL LEARN

> You'll learn how Yuka can help you shop

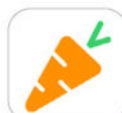
YOU'LL NEED

> Yuka app (Free, IAPs), iOS 13 or later



Genius tip!

> Yuka automatically adds all of its food and cosmetic recommendations to the Recommended tab, but you can remove any you don't want.



Would you like to avoid food additives, potential allergy triggers and other unpleasantness - such as

hazards that might be lurking in your make-up? Then Yuka (yuka.io/en) may be the app for you. It uses your iPhone camera to tell you what's in food or cosmetics, warn you of potential issues and suggest other products you might want to try instead. As you'll see in this tutorial, scores can be pretty

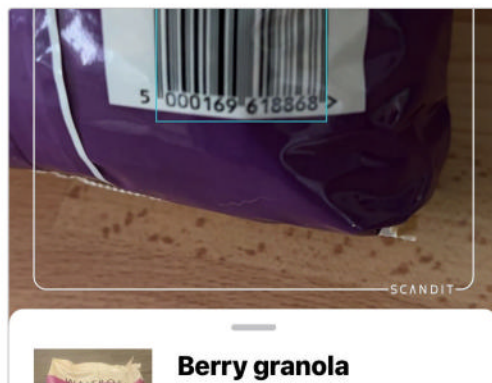
scary: you can forget about that chocolate bar you were going to have as a snack. But if you want to avoid unwanted ingredients such as palm oil, saturated fats and specific additives, or find more natural cosmetic products, the app can be very useful too.

Pinch of additive

It's worth noting that with apps such as this, it's important to understand that the information provided is an opinion. For example, the app told us flatly that MSG (or monosodium glutamate), a common flavour enhancer, is 'hazardous'. But many of MSG's supposed health risks have been wildly exaggerated, or would require you to ingest massive quantities.

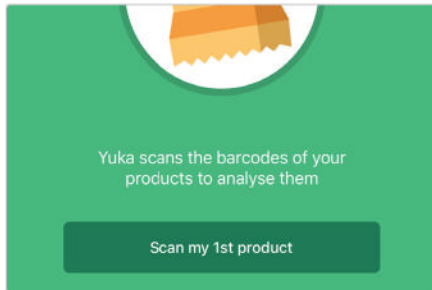
Similarly, after scanning an antiperspirant, the app told us it too was 'hazardous' based on the possibility that one of the ingredients might possibly include a specific impurity. To its credit the app does list its sources, but if you don't dig into them you might convince yourself that your local supermarket is the most dangerous place on Earth.

Carrie Marshall



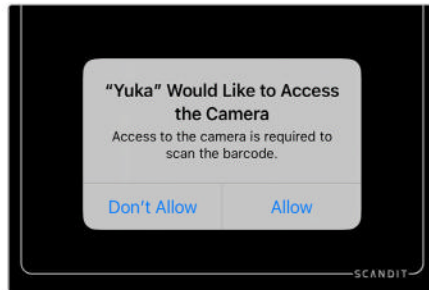
Looks like this Berry Granola's going in our basket - Yuka has given it an Excellent rating with an 84/100 score.

HOW TO Get a breakdown of your potential purchase >



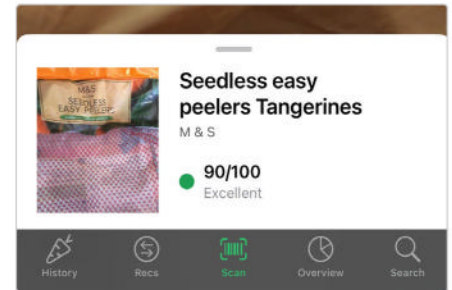
1 Sign up and in

To use Yuka you'll need to sign up for a free account with your email (you can use Hide My Email if you like) and a password. Once you've done that, you'll see a quick intro to the app and then this button, 'Scan my 1st product'.



2 Give it access

The Yuka app needs access to your iPhone or iPad camera in order to scan the barcodes, as those are where it gets its info from. The first time you use the app it'll ask for permission; if you say no by accident you can change it in Settings.



3 Scan your shopping

All you need to do now is point your iPhone at the barcode. Make sure the code is the right way up; it wouldn't scan upside-down ones when we tried. After a short pause, you'll see the result at the bottom of the screen.

	Fibre Some fibre	1.5g	●
	Energy Low calories	41 kcal	●
	Saturates Low saturates	0.1g	●
	Sugar No sugar	0g	●
	Salt	0g	●

4 Feel good about food

With a score of 90 out of 100, these bagged fruits score well. Tap on the score and you'll see a breakdown of the nutrition, but take it as a guide: Yuka tells us here that our tangerines, a naturally sugary fruit, don't contain sugar.

Negatives		per 100 g
	Additives Contains risky additives	3 ●
	Saturates Too fatty	8.9g ●
	Sugar Too sweet	65g ●
	Energy A bit too caloric	441 kcal ●

5 Don't check chocolate

There's no getting away from the fact that sweet treats will generally score low. The average chocolate bar tends to be high in sugar and oil or fat content, with a high overall caloric value. It's a similar story for fizzy drinks and crisps.

Negatives		per 100 g
	Additives Contains additives to avoid	3 ●
	Salt Too much sodium	2.07g ●
Positives		per 100 g
	Protein Some protein	7.8g ●

6 See what's inside

With processed foods it's often illuminating to see what's involved in making them; the combination of a few additives and quite a bit of salt means that Yuka is giving these (very tasty) chicken gyozas a score of just 8/100.

Monosodium glutamate	E621
● Hazardous	
	Flavor enhancer Increases the taste perception of food
Consumption of glutamate may cause a variety of symptoms, including nausea, migraine, skin flushing, hot flashes, etc.	

Ingredients	See all
Disodium EDTA	● Low risk
6 others ingredients	● Risk-free
Options	
Add to favorites	☆

PEG-4 Laurate	● Low risk	ⓘ
17 others ingredients	● Risk-free	▼
Recommendations	See all	
	Kind to Skin Micellar Cleansing Water Simple	
	93/100	● Excellent

7 Don't panic

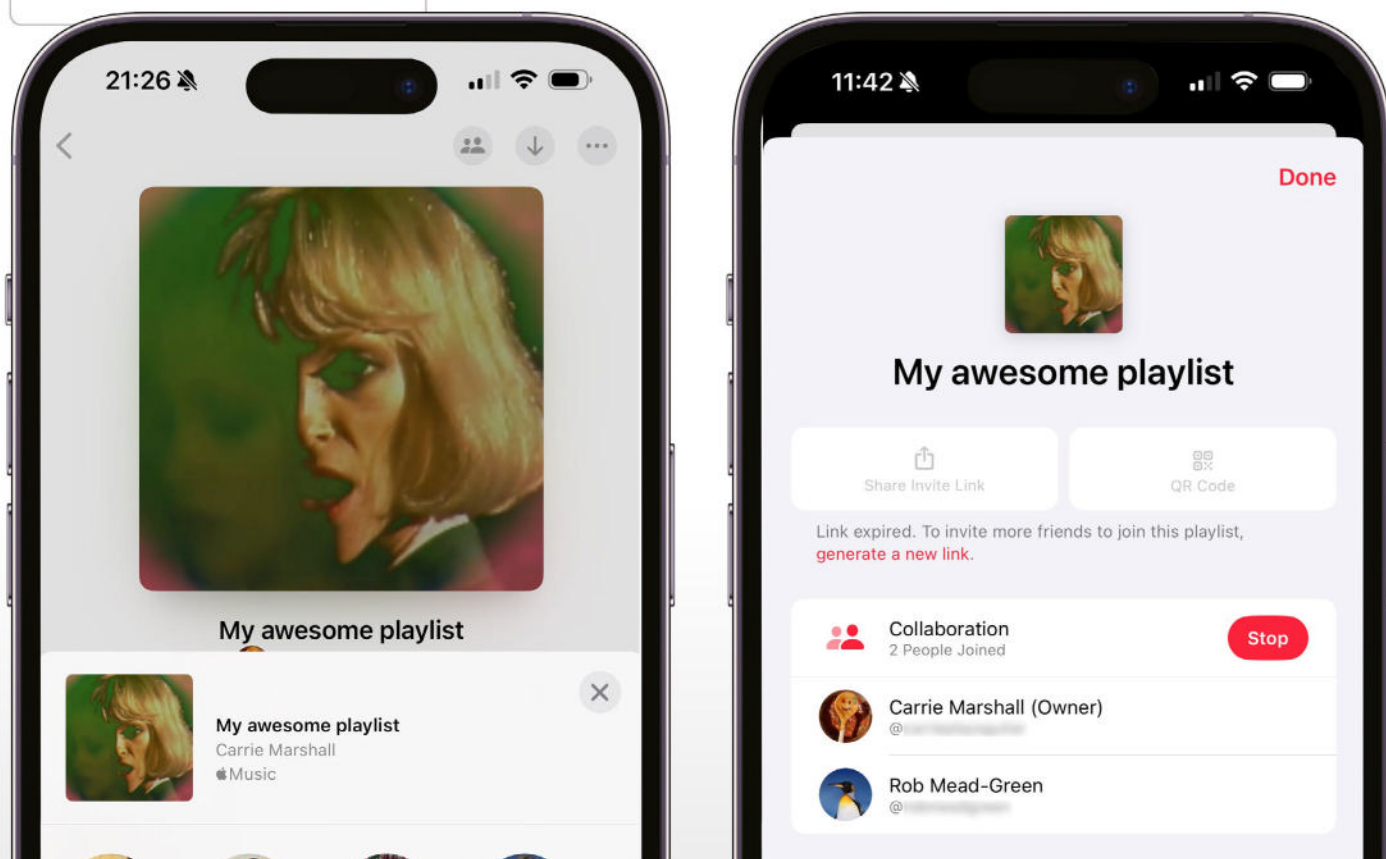
To Yuka's credit it cites sources for all of its health claims, but that doesn't mean they're necessarily right. For example, it classes MSG as hazardous, but the claims here refer to 'may contribute/cause', etc.

8 Check your cosmetics

Yuka doesn't just do food. It can scan many common cosmetic items to let you know if they contain anything you might not want near your skin. Again there's colour coding and percentage scores: our cleanser scores well.

9 Consider alternatives

As with food items, if Yuka thinks there are alternative options it'll tell you about them here - in this example, it's suggesting that instead of prepackaged cleansing wipes that we try a high-scoring micellar cleansing water.



Create collaborative playlists

Sharing is caring – and sharing playlists is a pleasure on Apple Music

IT WILL TAKE

> 10 minutes

YOU WILL LEARN

> To create and share collaborative playlists

YOU'LL NEED

> All those you're sharing with to have an Apple Music subscription



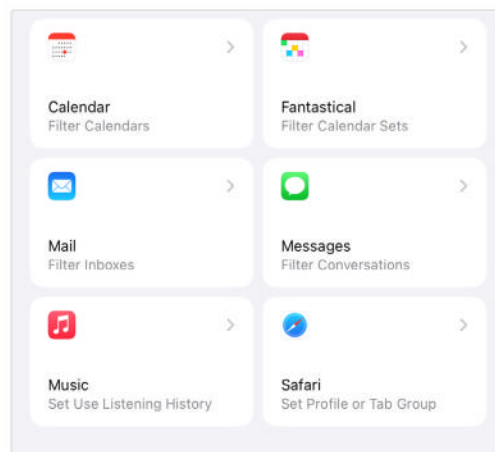
Genius tip!

> If you don't want other people to add to or re-order your playlist, don't use the collaboration option; just share the playlist as you would a photo or file.



Music's a social thing, which is why we flock to small clubs or big stadiums to be with our fellow fans. Obviously,

listening to a cracking tune solo on your AirPods is great, but music is even more fun when it's a shared experience. And one of the most fun ways to share it is to introduce your favourite music to other people.



Use Focus Filters (Settings) to turn off Use Listening History so that your listening won't affect future recommendations.

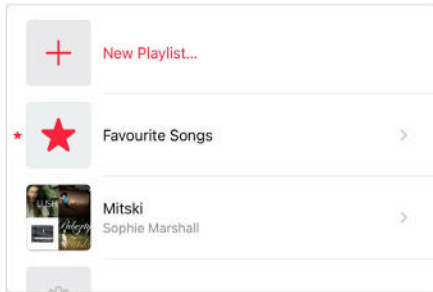
In the pre-digital days one brilliant way to do that was to make a mix tape on cassette for your friends or significant other; the modern equivalent, collaborative playlists, don't just enable you to share songs but also let others add their own suggestions too.

This is not just a playlist

Collaborative playlists are available in the Music app on iOS 17.3 or later, iPadOS 17.3 or later and macOS 14 (Sonoma), and you must be a paid subscriber to Apple Music to invite others or to take part in a collaborative playlist. That's because this isn't the same as a shared playlist, which is read-only; with collaborative playlists, the people you share with can edit and re-order the playlist too.

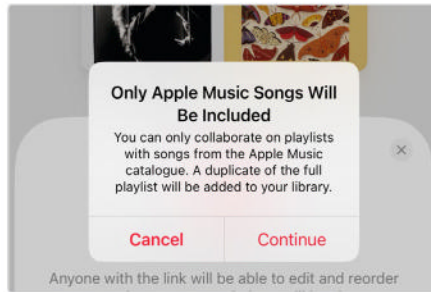
Collaborative playlists is a new feature, and it seems to have a few rough edges; for a few days it didn't work at all for us, an issue that now appears to be fixed, and the error messages could do with some work. Also, if you try to share a playlist with a family member under 13, it turns out you can't do that but, instead of saying so, Music tells you the sharing link has expired. **Carrie Marshall**

HOW TO Create a collaborative playlist >



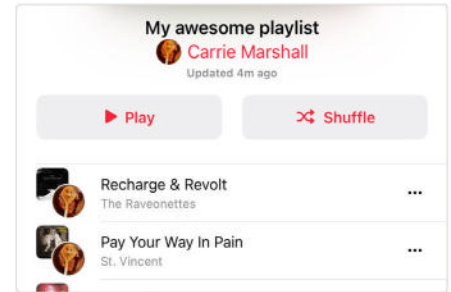
1 Pick a playlist

In order to share a playlist, we'll need to create or choose one. Open the Music app on iPhone, iPad or Mac then tap or click on Library > Playlists. You can now select one of your existing playlists or use the big red '+' to add a new one.



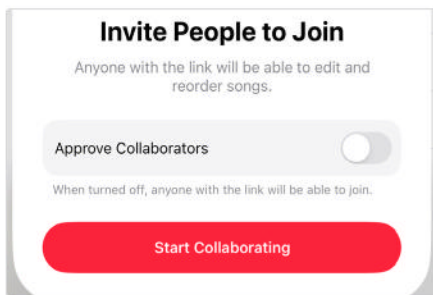
2 Don't go local

For collaborative playlists, you can only use songs from the Apple Music catalogue; if your playlists also contain songs from your local music library, you'll get this message and your playlist will be duplicated without the local tracks.



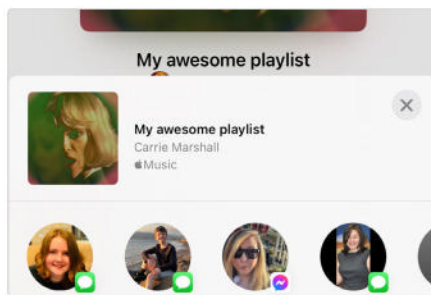
3 Choose your songs

We've put together a playlist of Apple Music tracks that we want to share. As you can see, our name appears just below the playlist title. To add friends, tap on the icon showing two silhouettes towards the top right (not shown).



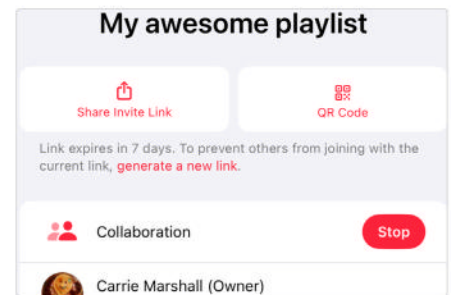
4 Set your sharing

You should now see the option to 'Invite People to Join'. This will enable you to share your playlist, and it'll create a shareable link; anyone who gets sent the link can then edit the playlist. You can use Approve Collaborators to limit that.



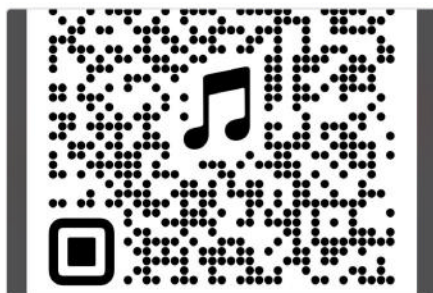
5 Share the songs

Tap on Start Collaborating and you'll see your Share options (we're using iOS here), with all the various different apps and your most recent contacts at the top. Now it's just a matter of picking the person you want to share with.



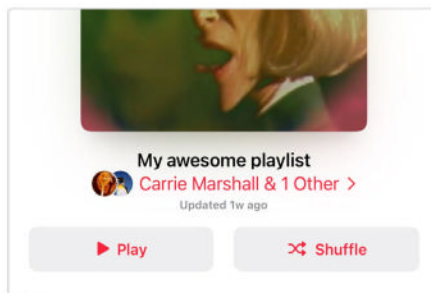
6 Add more people

You can use the Collaboration icon (two silhouettes) to add more people at any time, and once you've shared a playlist for the first time this is the screen you'll see. You've got two choices here: Share Invite Link and QR Code.



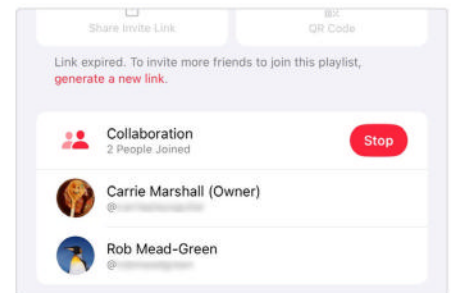
7 Crack the code

A QR code enables you to share locally; get the person to point their iPhone camera at the code and it'll take them to the playlist in the Music app. Don't post QR codes publicly without turning on Approve Collaborators.



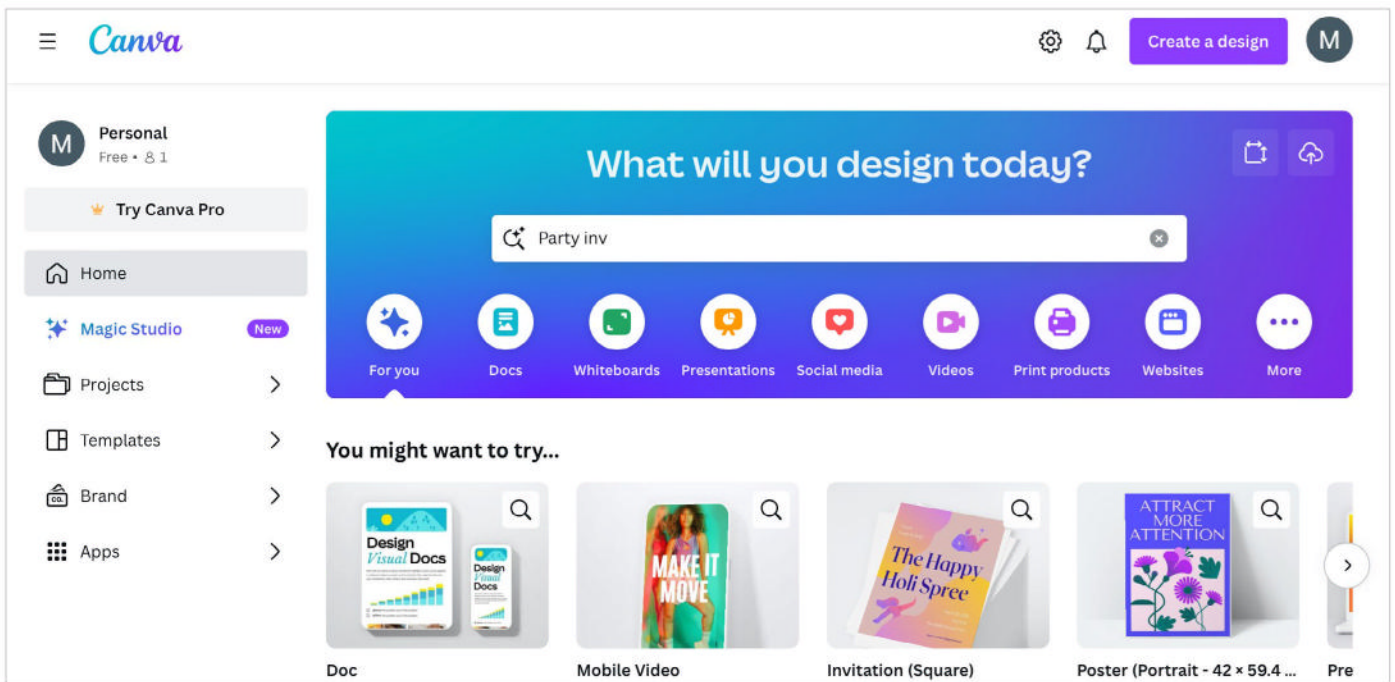
8 Start to share

Collaboration works just like it does in Pages or Sheets; when the other person accepts your invitation, you'll get a notification on your device and you'll see another person listed in your collaborative playlist in the Music app.



9 Turn it off

If you decide that you no longer want others to collaborate on your playlist, you can uninvite them as easily as you invited them. In the Collaboration page for your shared playlist, simply tap the Stop button to end collaboration.



Get creative with Canva

Create vibrant artwork, docs, posters, and more with this arty app

IT WILL TAKE

> 20 minutes

YOU WILL LEARN

> How to design and edit a variety of artwork options

YOU'LL NEED

> Canva (Free, IAPs), iPadOS 13 or later



Canva is one of the most useful art and design apps on the iPad, thanks to its ease of use and sheer flexibility. Available for

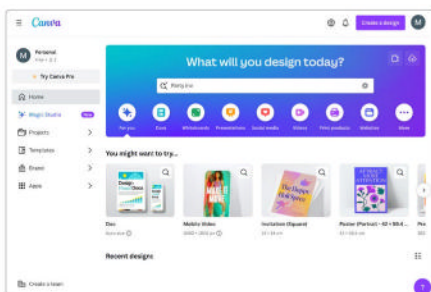
free or with a Premium subscription for £12.99/month or £99.99/year for more elements, Canva is the perfect app to create artwork, posters, documents, and more.

Usually, design apps offer limited services on the free tier, but Canva is genuinely useful without forking out for a Premium membership. The platform is not only one of the best apps

on iPad but also one of the best apps on just about any Apple kit, and all of your projects will transfer between your devices.

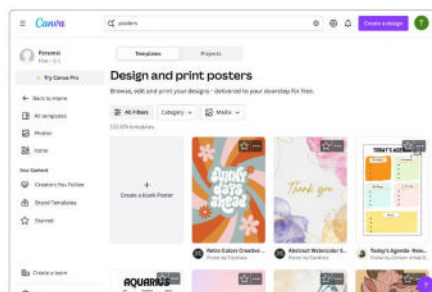
If you're looking for an app to start making designs for your small business or create artwork in your spare time, Canva is the perfect companion to unleash your creativity. This tutorial will teach you some of the most basic tools, including removing the background from an image with the tap of a button or using a template to create a presentation slide or Instagram post. **John-Anthony Disotto**

HOW TO Get started with Canva >



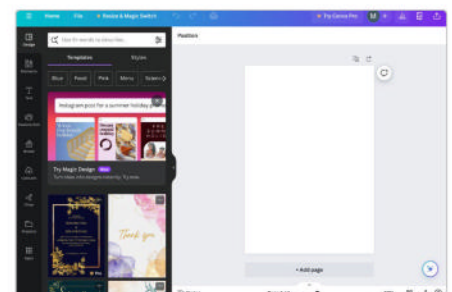
1 Choose a format

Tap one of the icons on the home screen, such as Social Media, Docs, Presentations, to explore templates. For something more specific, like a greeting card, an invitation or a poster, use the search bar to find your desired format.



2 Use a template

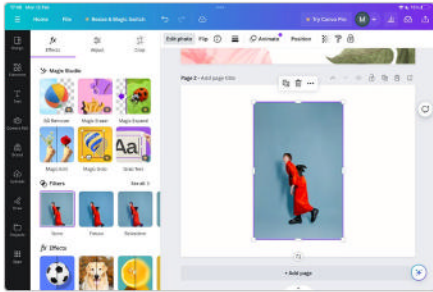
Once you've chosen a format, you'll be shown the templates available for it. If you're finding it hard to choose, tap the All Filters or Category buttons to narrow down your search. Alternatively tap 'Create a blank...' to start from scratch.



3 Start from scratch

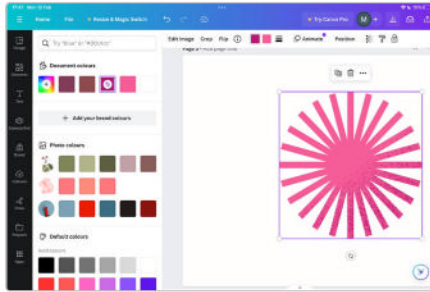
Use the sidebar on the left to add elements, choosing from graphics, stock imagery, text, and pictures from your camera roll. Some elements are only available with a premium membership, but the free catalogue is substantial.

HOW TO Edit your Canva elements >



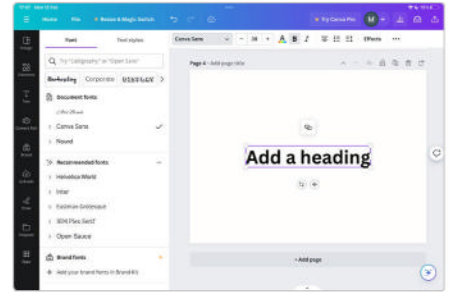
1 Remove background

If you've added an image from uploads or camera roll but want to replace the background with a solid colour so that it either 'pops' or blends in, select the image, and tap Edit Photo > BG Remover. (Note: this is a Premium feature.)



2 Change colours

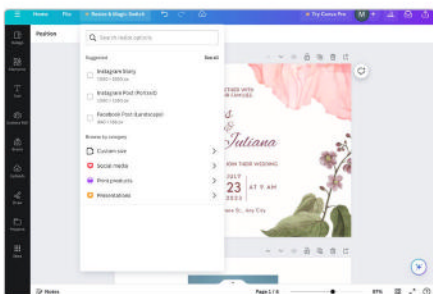
To change the colour of text or editable shapes, select the item, and tap on the coloured square or font colour icon (top right), then type the colour or name required. Or tap the rainbow square to use the colour picker.



3 Change fonts

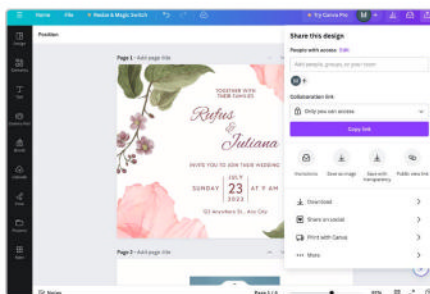
To change fonts, select the text you want to edit, then tap Fonts > Browse Fonts, and choose one. Alternatively, tap Text in the sidebar on the left to use font combinations for a more elaborate visual text display.

HOW TO Resize and share your work >



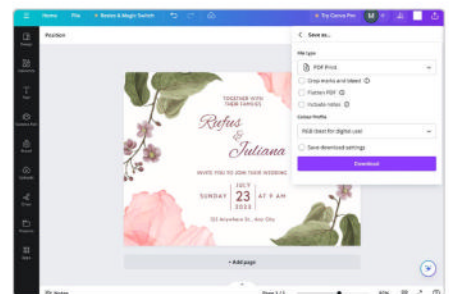
1 Resize the project

If you want to resize your project without starting from scratch or to adjust it for a different purpose, select File > Resize and Magic Switch, then select the required format and save as new or format the original.



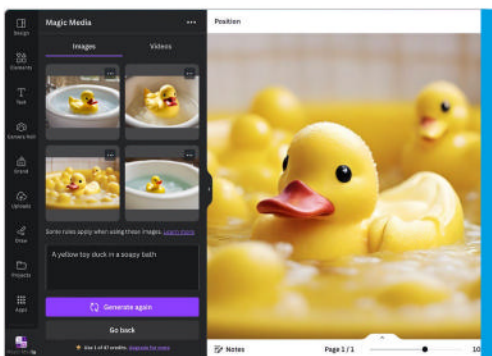
2 Collaborate with others

Canva is the perfect platform to collaborate with others, whether you want someone to work on a project with you or simply view it. To share a project, tap Collaborate, add names or email addresses and set access preferences.



3 Download and export

You can send your artwork to print, share it directly to social media, or download it to your device. Tap Share > Download, then select the file type and size, and specify the pages you wish to export, then tap Download.



Get a little help from AI

Use text prompts to create original images >

If you have an image in your head, but not the artistic chops to create it, Canva's built-in artificial intelligence tool can help. Simply tap Magic Media in the toolbar, select either Images or Videos and then type the thing you're thinking of in the text entry field. Tap the 'Generate image' or 'Generate video' buttons at the foot and voila! Within seconds, Canva will create suitable content for you. If you're happy with the results, pick one and drag and drop it onto your canvas to position or resize it. Or tap Clear in the text field to try again.



Give your Watch a new look

Transform your Apple Watch with Watchsmith and Facer

IT WILL TAKE

> 15 minutes

YOU WILL LEARN

> To customise faces and complications

YOU'LL NEED

> Watchsmith app, watchOS 8 or later;
Facer app, watchOS 7 or later



We love the Apple Watch, but sometimes we wish there that was more customisation than Apple allows. While we can

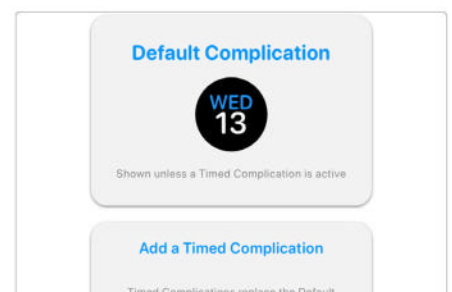
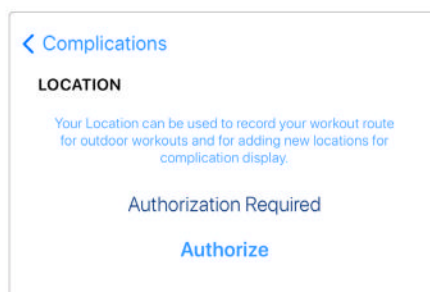
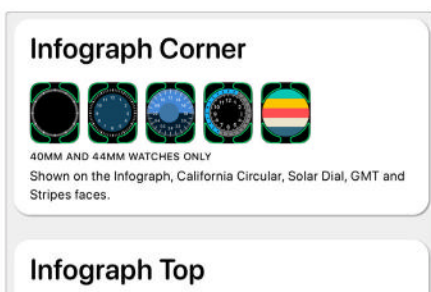
change the colours and complications of a face, the choice is limited. The App Store can help. Two apps in particular, Watchsmith and Facer (aka Watch Faces by Facer on the App Store), can design new complications and supply you with entirely new watch faces too.

Both apps offer customisation but they focus on different things. Watchsmith is

designed primarily around complications - the little nuggets of information, such as weather data, activity circles and calendar events. And Facer is more about changing up entire watch faces.

In this tutorial, we'll discover how you can use these apps to completely customise your Apple Watch. We'll stick with both apps' free features only; you can unlock more features and faces via in-app purchases but, as we'll see, you can do a lot for free. **Carrie Marshall**

HOW TO Customise your Apple Watch >



1 Select a face

Although Watchsmith provides some useful Apple Watch tools, its core job is to create new, useful complications for your watch faces. To do that it's just a matter of scrolling through the faces to decide what face you want to edit.

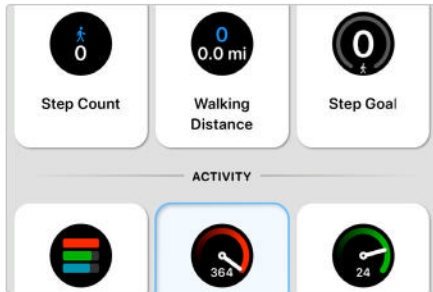
2 Give permission

The majority of complications require data from core apps - Fitness complications need access to Health; Maps needs access to location, and so on. Tap Manage Permissions and authorise the data you want to let Watchsmith use.

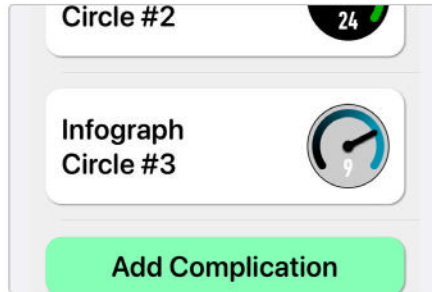
3 Choose a complication

Tap on your chosen watch face and you'll see this screen; it may look slightly different for faces that don't support circular complications like the Infograph one we've chosen here. To change the complication, simply tap on it.

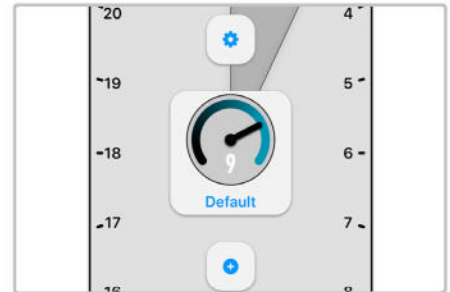
CONTINUED... Customise your Apple Watch >



4 Browse the collection
You'll see a selection of available complications, helpfully organised by category: Activity, Weather, and so on. Simply swipe through the gallery until you find one you want to use. You can change its font, colour and background.



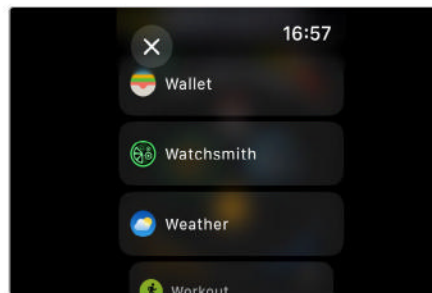
5 Add more complications
Save your complication and you'll be returned to the previous screen, this time with a big Add Complication button on it. Here we've added two more complications that we want to use on our Apple Watch face.



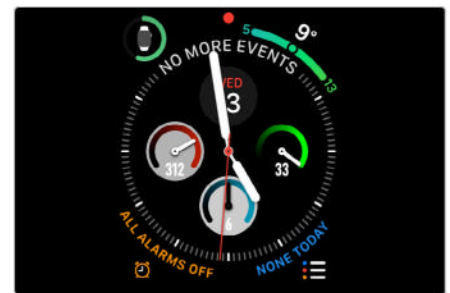
6 Set a timer
Watchsmith enables you to create timed complications on supported faces. You can tell your Apple Watch to display a particular complication at specific times, making various complications more useful according to your schedule.



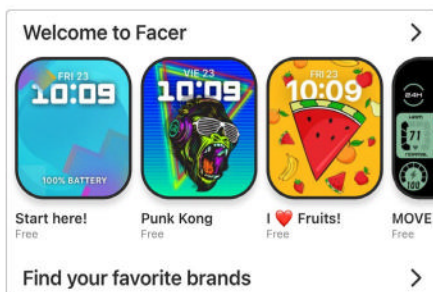
7 Change your face
To use a complication, go to the Watch Face gallery, choose a face and press and hold to bring up Edit. Tap Edit, then swipe to Complications. Tap on the first complication you want to replace with a Watchsmith one.



8 Choose the app
The available complications are organised by app name, so you might need to swipe or scroll until you see the option for Watchsmith. Tap on that and you'll then be taken to the list of available complications for this watch face.



9 Add your others
Once you've added your first complication the process is exactly the same for other ones; tap the complication you want to replace, select Watchsmith, then choose the specific complication you want to add.



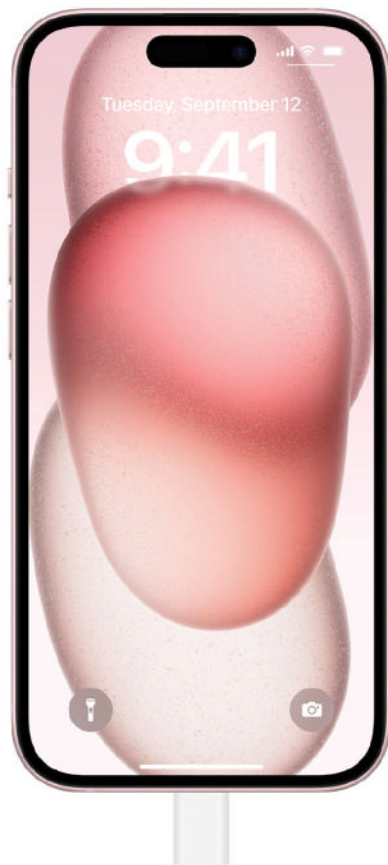
10 Get new faces
If you want to replace your Apple Watch face, Facer is a great option; some of its designs are an acquired taste but there are tons to choose from. The app includes free faces you can use before deciding if you want to pay for Premium.



11 Select your style
Finding a face is simple enough; you browse the Watch Face gallery just like you'd browse for apps in the App Store. We're quite taken with this Casio-esque take on the Infograph Modular face, so we'll tap the blue Add To Watch icon.



12 See your style
The watch face will be added to the Watch app on your iPhone, where you'll see a screen like this one; add the new face to My Faces with the button at the bottom of the screen and it'll then be added to your gallery of faces.



The iPhone finally has a USB-C port, and that brings a great range of connectivity benefits.

HOW IT WORKS

The iPhone 15's USB-C port

The arrival of USB-C means you can team your device with loads of add-ons

YOU WILL LEARN

► The benefits and pitfalls of the USB-C connector and the devices you can connect

Key fact

► If you have a High Dynamic Range (HDR) USB-C display, connect your iPhone using a USB-C cable supporting USB 3.1 or higher then alter the settings to get the most out of it. Just open the Settings app, tap Display & Brightness and select the display you're using. When you turn on Allow Display Mode Changes, the frame rate and dynamic range will adjust.

Introduced in 2012, the **Lightning connector has long been a key part of the iPhone range.** Apple wanted it to remain that way despite switching to USB-C – the standard adopted by practically every other manufacturer – with its laptops and iPads. But the European Union (EU) had other ideas, forcing the company to ditch Lightning in favour of USB-C for the iPhone too, even though the Cupertino giant said “innovation would be stifled by the proposal”.

As it happens, the move has many benefits, not least a likely long-term reduction in e-waste. The EU reckons that a standardised cross-platform port (as opposed to proprietary tech like Lightning) will eventually save 1,000 tonnes of e-waste each year. USB-C also means that Android and iPhone users can share cables and it opens the door to a large ecosystem of accessories originally intended for non-Apple devices.

Before we take a look at some of some of those uses, it's worth pointing out three things. First, there are different USB-C standards so not all cables are equal – some allow for fast charging and high-speed data transfer rates and some do not, so you need to do your homework (at least look for USB-IF certification). Second, Lightning is actually

similar to USB-C in that it allows you to connect a whole host of devices, hence Apple's Made for iPhone programme so that consumers would know which products were certified compatible. Third, USB-C cables can be fragile so you may still end up contributing to that e-waste mountain.

Normal vs unified

Still, there is one big advantage of USB-C over Lightning; the former allows for faster data speeds, particularly on the iPhone 15 Pro and iPhone 15 Pro Max which support USB 3.2 Gen 2 speeds of up to 10Gbps so long as you use a USB 3 cable. To take advantage, you can hook up an external SSD, particularly if you want to use your iPhone to record video in the highest possible quality. Opt for a drive can write at speeds of 220MB/sec or more such as the SanDisk Extreme Portable or Crucial X6 Portable and you'll be able to record 4K ProRes video at up to 60 frames per second (fps) rather than the 30fps you can commit to your iPhone's internal storage.

It's also possible to hook up USB-C flash drives which will allow you to free up space, easily move content between your iPhone, iPad and computers and backup files – even password-protecting them if you wish. One of

Manage your documents in the Files app

Connected a USB flash drive, SD card, microSD card or SSD to your iPhone (whether direct or via an adaptor)?

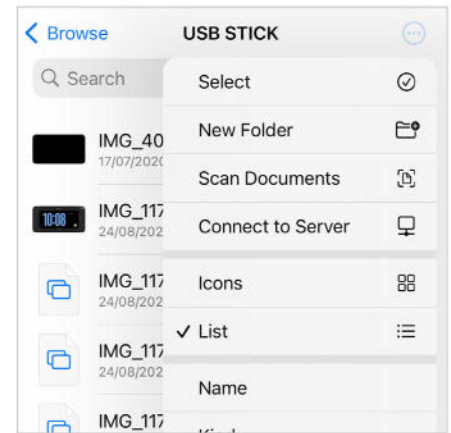
Then, as long as it has a single data partition and has been formatted as APFS (encrypted or not), macOS Extended (HFS+), exFAT (FAT64), FAT32 or FAT, you can view its contents using your iPhone's Files app.

Simply launch Files on your iPhone, select the external device listed under Locations in the Browse tab and any saved files and folders will appear. In most cases, you should be able to tap, open and view them directly and, if you tap the '...' button in the top-right corner,

you can view the files as a list or as icons, and arrange them by name, kind, date, size or tags.

You can also create a New Folder on the external device, scan a document and save it straight to the card or drive, or remove files and folders by swiping left and tapping Delete. By tapping and holding a file to rename, compress or duplicate it, you can tap Move to store it in the cloud or on your iPhone.

Likewise, you can use the same method to move files from iCloud or your iPhone to your connected card or drive and even tap Share and share the files with others.



You're now able to view the contents of a variety of storage options direct from your iPhone.

the best examples is the SanDisk iXpand Flash Drive Luxe which has the advantage of having both Lightning and USB Type-C connectors for backwards compatibility. But there are lots of other USB-C flash drives on the market (many at low prices) and, if you have a standard USB flash drive knocking around, you can make use of that too, so long as you buy a USB-C to USB-A adaptor.

The adaptor can be used for other devices such as a camera but you may find that a straightforward SD card reader that plugs directly into the USB-C port is a better option if you want to port photos and video from a dedicated digital camera. Anker, one of the best brands for this kind of thing, has an inexpensive memory card reader that boasts high-speed syncing and works with microSD and SD cards; Apple's own USB-C to SD Card Camera Reader costs about three times as much. Use the Photon photography app and you'll be able to directly save captured ProRAW photos externally to a USB-C drive.

More dynamic

If you wish, you could then connect your iPhone to a USB-C DisplayPort-supported monitor, TV or projector and mirror images from your device on the big screen at up to 4K and 60Hz. This is great if you're looking to show off a presentation, for instance, or if

you want to let people see your photos or videos. For the best results, use a USB-C cable that supports USB 3.1 (that is, not the one you get out of the iPhone box) or, if you're looking to connect via HDMI or VGA, use a USB-C Display AV Adaptor or USB-C VGA Multi-port Adaptor. Opt for an HDMI 2.0 cable for 4K, 60Hz output, but be aware you won't be able to stream copy-protected (HDCP) content.

Hooking up to a TV will also enable you to play games from your iPhone on a larger display and since it's possible to connect a Bluetooth controller to your device (including PlayStation, Xbox and Switch Joy-Cons), this effectively turns the iPhone into a highly portable games console. As a result, you'll be able to take your Apple Arcade subscription to another level with games such as GRID Autosport, Journey and Life Is Strange. It helps turn your iPhone into an even more prominent entertainment device.

This extends to audio too. You can use USB-C headphones with your iPhone 15, the benefit being that the digital-to-analogue converter (DAC) and amp are contained in the headset, enabling you to take advantage of an individual audio manufacturers' components. You could also plug in a

microphone and turn the iPhone in a recording studio. As you can see, USB-C is something to make a noise about. **David Crookes**



You can pick up many inexpensive USB-C monitors to connect to your iPhone, including this Dell S2722QC.

Key fact

➤ Opting for a cheap USB-C cable may cause problems if you're connecting devices to your iPhone 15. Some of them don't include data lines and they are only useful for charging. This means if you want to connect your iPhone 15 model to, say, CarPlay, you may find it fails to communicate. Choose high-quality, pricier cables from brands you trust.

USB-C allows for faster data speeds of up to 10Gbps with a USB 3 cable

GENIUS TIPS

EDITED BY **HOWARD OAKLEY** >

EXPERT ADVICE

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Email your queries and your questions to genius@macformat.com



Is 'storage debt' dangerous?

Now that you can rent up to 12TB of storage in iCloud+, some Macs are running into 'storage debt'.

That can only occur when they have Optimise Mac Storage turned on in iCloud settings, and many of the files in iCloud Drive have been evicted from that Mac's local storage. When the total size of those evicted files exceeds free storage space in your Home folder, there's no longer the free space to accommodate the entire contents of iCloud Drive.

Like other forms of debt, that isn't necessarily bad, but it does come with significant side effects. If they're only stored in iCloud, Time Machine can't back those files up, nor can Spotlight search them. Not only that, but you're a prisoner of Optimise Mac Storage, can't turn it off, and you're committed to paying for sufficient storage quota.

How to restore iCloud shared databases

Q I have a key app that syncs its encrypted database using iCloud. If I needed to, could my Time Machine backups restore that database?

by SCOTT ANDERTON

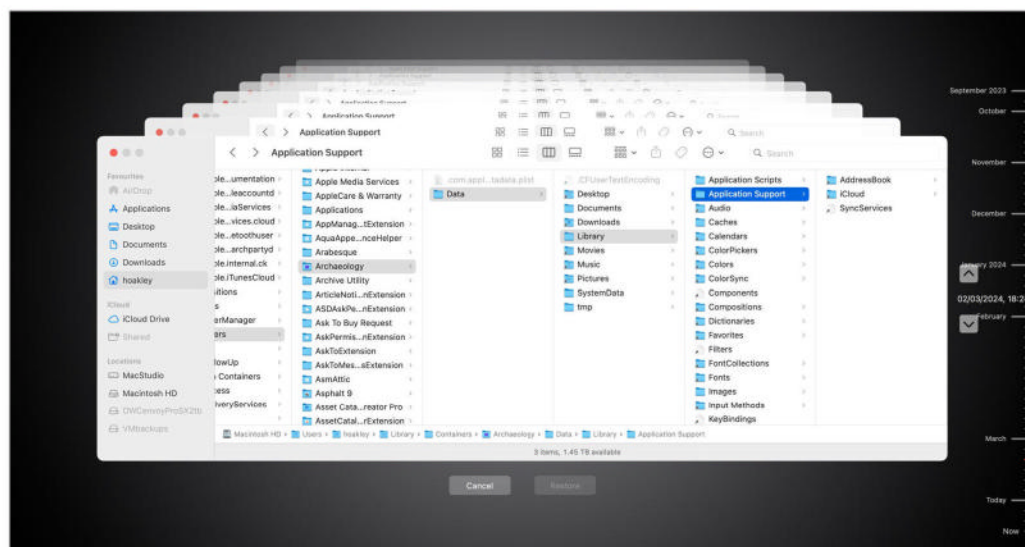
A In most cases, shared databases in iCloud should be backed up by Time Machine if it makes backups of your Home folder, and you haven't put the Library folder within that in the list of excluded locations.

Shared databases like this shouldn't be included in your iCloud Drive. But the local copy of the database they save to iCloud using iCloudKit, a different service from file sharing in iCloud, should be located in a

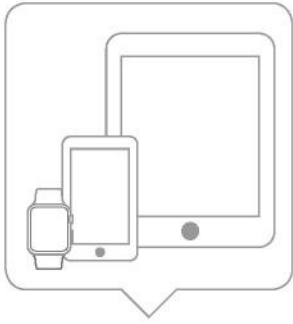
folder inside your user's Library, normally inside a suitably named folder in Containers there. That app's documentation may identify its location.

Even when you set iCloud Drive to Optimise Mac Storage, so files can be evicted and not held locally, shared databases remain accessible on your Mac. The app uses that for its transactions, that are then synced to the copy of their database in iCloud.

The easiest way to restore shared databases, though, is simply for them to be synced down from iCloud, requiring no effort on your part, or access to hidden folders. For some of the more common databases such as those of Apple's bundled apps, that's usually the most reliable.



You should be able to restore shared databases from Time Machine backups – check your Home Library/Containers folder.



iOS software >

Swipe away your touchscreen troubles and rekindle your love of Apple's mobile devices

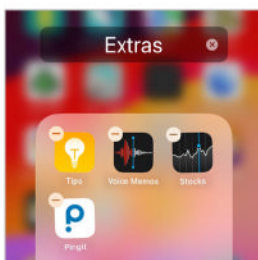
Quick-fire questions >

How to keep my iPhone's ringtone set to maximum?

> Disable the volume buttons to prevent any inadvertent changes. In Settings > Sounds & Haptics turn off 'Change with Buttons', and set the volume control above to maximum.

How to make a folder for apps on my Home Screen?

> Open the Home Screen page containing one of the apps to go into that folder, and tap and hold until the app icons jiggle. Drag another app to be added and drop it on the first app. iOS puts both apps inside the new folder, and you can edit its name. Tap to stop the apps jiggling, then tap outside the folder to close it, and tap again to return the Home Screen to normal.



Get CarPlay to start up

Q When I changed to an iPhone 15, I bought an adaptor and cable to connect it to CarPlay. While it charges correctly and I can make phone calls, it won't connect for anything else. How can I get it to work?

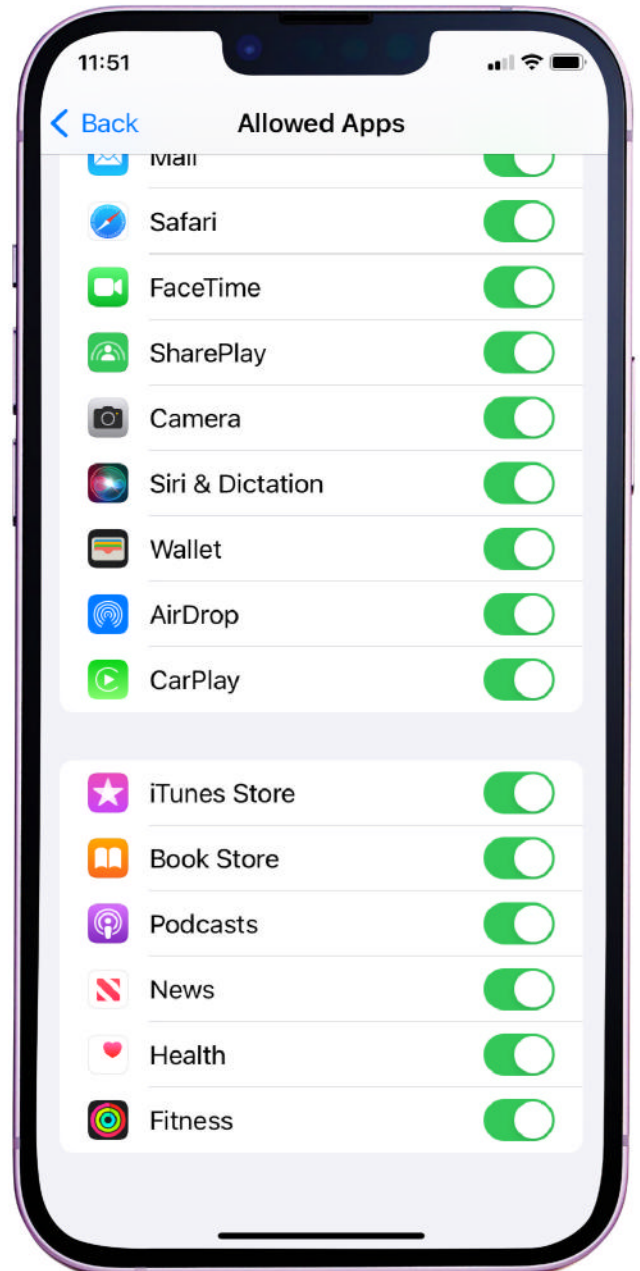
by HUGH COWARD

A Assuming your car is a model in Apple's list at bit.ly/mac404carplay, that CarPlay is supported in your country, the cable and adaptor are good, and your iPhone is running the latest iOS, this should be straightforward. But when it doesn't work, there are enough things that can go wrong to make it tricky to fix.

Start with the cable connection, using an official Apple USB-C to Lightning Adaptor, with a branded USB-A to USB-C cable if needed. Ensure that Bluetooth and Wi-Fi are also turned on for your iPhone, and check the car's Auto-Join setting is turned on for the CarPlay network.

Restart your iPhone and your car's system, then ensure that Siri is turned on. In Settings > Screen Time > Content & Privacy Restrictions, if turned on, check that CarPlay is enabled in the list of Allowed Apps. If it still hasn't set up properly at this stage, in Settings > General > CarPlay, tap your car and then Forget This Car to set it up from scratch once more.

The final step is to arrange with your garage for them to take a look with you,



Some controls that can block CarPlay are hidden away; this is buried deep in Screen Time's Allowed Apps.

and if necessary to perform a full reset of the car's head unit in its infotainment system. They may also be able to update the car's software support in the process.



Networking >

We help to solve your Wi-Fi woes and connection conundrums

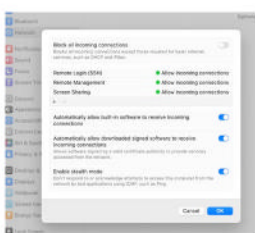
Quick-fire questions >

How to set my Mac to sync with an NTP server?

> Network Time Protocol (NTP) servers deliver accurate time to set your Mac's clock. This should normally be set to the default in System Settings > General > Date & Time, to enable it to set automatically. If you have a better alternative, click the Set button for Source, and enter its web address.

How to enable stealth mode on my Mac?

> This is only available when you enable your Mac's software firewall. Open System Settings, open Network there and click Firewall. Turn that firewall on, then click on the Options button. Turn on 'Enable stealth mode', and turn off 'Block all incoming connections' unless you also want to enable that firewall.



Recover documents from iCloud Drive

Q I'm trying to keep my documents both locally on my Mac and copied to iCloud Drive, so I turned on Desktop & Documents in Sonoma. Everything has ended up in iCloud, and it's no longer on my Mac. What have I done wrong?

by NICK COOK

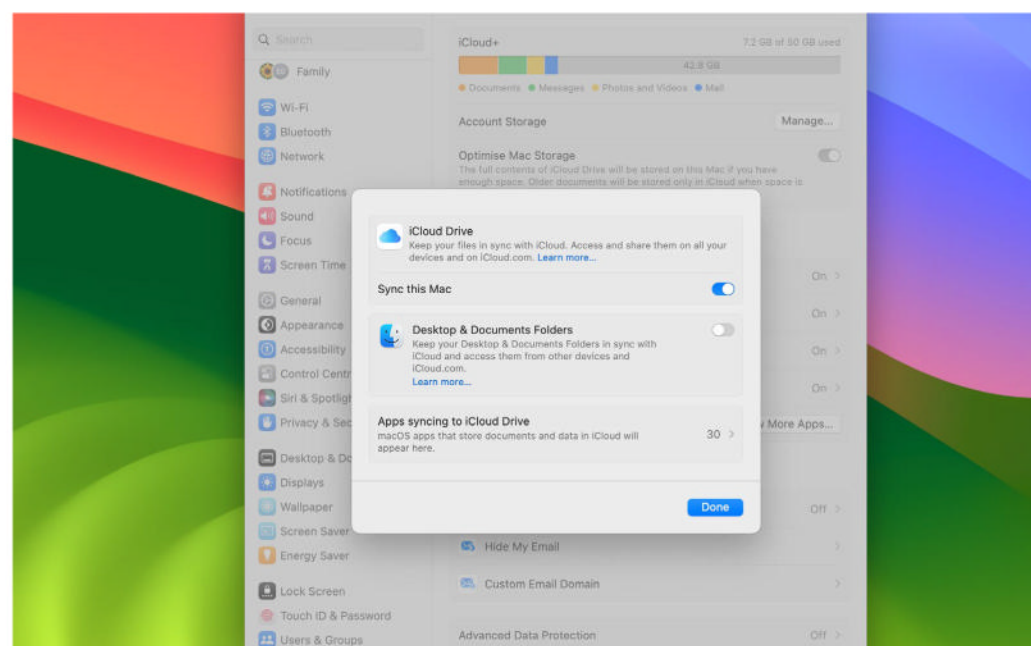
A iCloud Drive has two fundamental controls: Optimise Mac Storage in iCloud settings, and Desktop & Documents Folders, accessed by clicking iCloud Drive in Apps Using iCloud there. You also need 'Sync this Mac' enabled to allow these to work properly.

With the Optimise Mac Storage option turned off, your Mac contains an identical copy of everything you put in iCloud Drive, and can't remove or evict files so that they're only stored remotely. With it turned

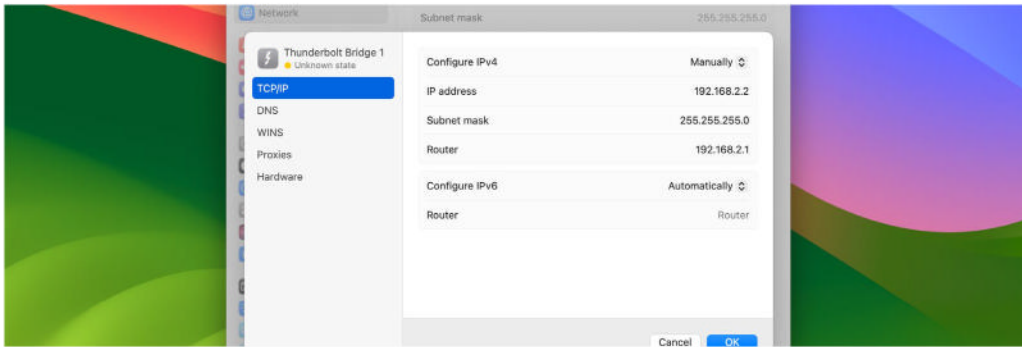
on, both you and macOS can decide to evict local files by removing the data from them, so it has to be downloaded again before they can be used. That frees up storage on your Mac, but evicted files can't then be backed up or searched as a result.

The Desktop & Documents Folders setting determines whether those two folders become part of iCloud Drive. Provided that Optimise Mac Storage is turned off, it doesn't remove anything from your Mac, although many users find it disorientating as those folders no longer appear to work the way they used to.

Unless you want the entire contents of your Documents and Desktop folders in iCloud Drive, it's better to copy or move files manually into its folders, and that's the more popular choice. If you change either setting, expect iCloud to run a large sync afterwards to set itself up properly.



Turning Desktop & Documents Folders on doesn't actually remove those folders from your Mac, but moves them into iCloud Drive.



To enable Thunderbolt networking, connect both Macs using Thunderbolt and add a Thunderbolt Bridge network device.

High speed networking for old Mac Pro

Q I've just updated my old Mac Pro with a USB-C PCIe card. Can I connect that to my MacBook Pro's Thunderbolt port using a Thunderbolt cable, and network them?

by JOE BLAKE

A Although Thunderbolt 3 and 4 use USB-C ports and cables, they require special interface hardware to combine their DisplayPort video data with PCI Express 3.0 x4 through a dedicated Thunderbolt chip. That's not the same as regular PCI Express run over USB, and your MacBook Pro won't recognise that as

Thunderbolt, so can't run Ethernet over Thunderbolt network protocols through it.

Some people have managed to upgrade their 'cheesegrater' Mac Pros with Thunderbolt 3; but even if you can manage that, you'd still have to get your Mac to recognise that as a network port. That requires adding a Thunderbolt Bridge network device to its Network settings, which seems an unlikely prospect.

Otherwise, your best option is to locate and install an expansion card that includes 10Gb Ethernet, although you'll then need to buy a matching Thunderbolt to Ethernet 10G adaptor, which would be expensive.

Who to report a fake Apple email to?

> If you receive an email claiming to be from Apple, but you're fairly certain that it has been forged, forward it to reportphishing@apple.com. Ensure you include header information using the Forward As Attachment item in the Message menu.

Is there a modern equivalent to a Helios LAN Test?

> That extensive test and benchmarking software for local area networks (LANs) only appears to be available as an old 32-bit app that won't run on any version of macOS after Mojave. There doesn't appear to be anything similar to replace it either.

Make fresh backups to a full NAS

Q Storage on my NAS is now completely full of my old Time Machine backups. As I've just got a new iMac, how can I start again with fresh backups?

by DAVID HIGNETT

A This is a good time to consider replacing the hard drives currently in your NAS system, as you could then put the old ones by as archives, and start your new backups on a set of brand new drives. Before changing anything else, update the operating system on the NAS



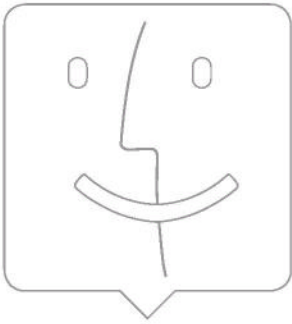
Migrating to a new Mac is a good time to consider putting old backups into archive and replacing the hard drives.

according to its documentation, to ensure it's fully compatible with your new iMac, which will prefer using the SMB protocol rather than AFP (which is

being phased out in macOS). Ensure the iMac has been fully migrated, and you don't need anything from those old backups to assist.

If you've replaced the drives, you'll need to completely initialise those new drives anyway; if you're going to continue backing up to your old drives, use the web browser interface to the NAS to wipe and re-initialise them. That will create new volumes,

on which you set up the new backup stores. On your iMac, remove any old store from Time Machine's settings and add the new one you've just created on the NAS. The first full backup should then start, and may need to be left running overnight to complete.



macOS >

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

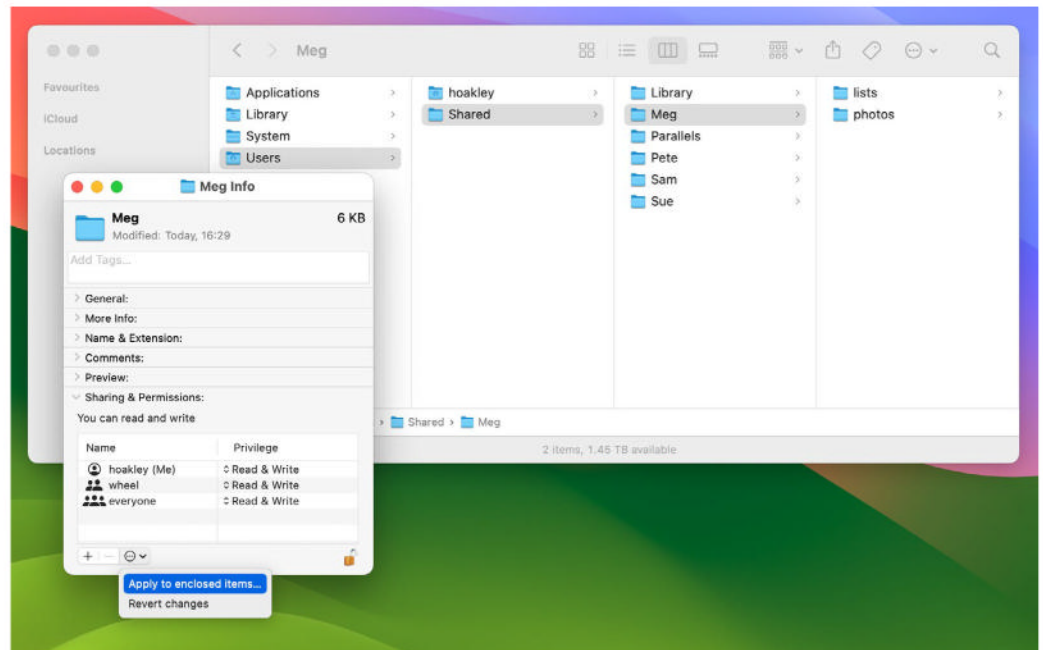
Quick-fire questions >

How to update firmware on an old Mac in Mojave?

> Firmware updates now only come as part of macOS updates. The last security update for Mojave was 2021-005 (21 July 2021), which should have been installed. Unless you want your Mac to lose the ability to run 32-bit apps, you shouldn't install Catalina or later.

Can Rosetta 2 run old 32-bit Intel apps?

> No, it can only translate code and run 64-bit Intel apps that are compatible with more recent versions of macOS, from Catalina onwards. As Apple silicon Macs can't run Intel-only versions of macOS in virtual machines, the only way you might be able to run them is in emulation using UTM.



Use the 'Apply to Enclosed Items' command in the Get Info dialog to change permissions for all files inside a shared folder.

Give everyone write access to shared docs

Q Each family member has their own folder in Users > Shared on our main Mac for sharing documents.

Although set to give everyone read and write access, when they save new files there others can't write to them. How can we change permissions to allow that?

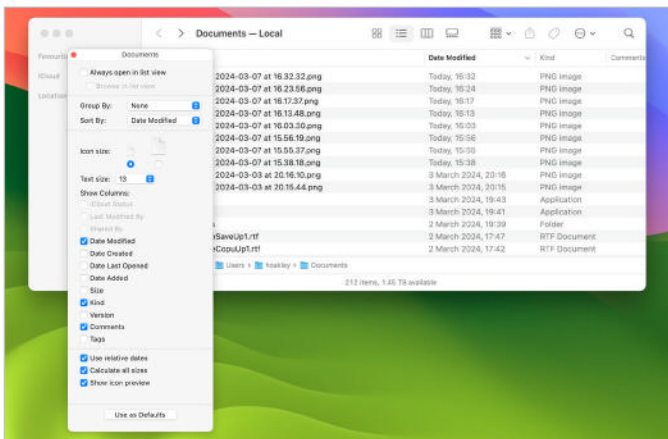
by GRESHAM ARNOLD

A Although part of the permissions system in macOS, those set for new files created by users aren't determined by the permissions of the enclosing folder, but by a user's umask. The standard umask sets permissions on all new files created by a user so that everyone has read-only access, and can't write to that file.

Although you can change a user's umask, as described by Apple at bit.ly/mac404umask, that isn't wise, because it changes permissions

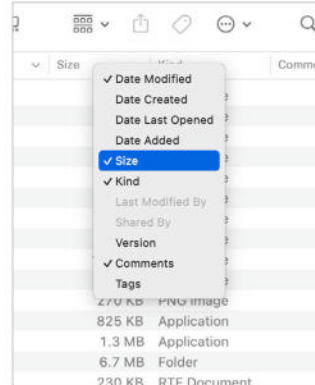
on every file that they write. umasks can't be applied to just specific folders, though, and the only system capable of doing that is an extension of basic permissions in Access Control Lists or ACLs. Those override standard permissions with a complex and finer-grained system of Access Control Entries that can give write access to everyone according to the folder permissions.

ACLs can be set using the `chmod` command in Terminal, and using TinkerTool System 8 from bit.ly/mac404tinkertool. However, they're complicated and the risk of causing problems is significant. A simpler solution less likely to mess up your shared folders is for each user to periodically select their shared folder, open the Get Info dialog, and correct permissions with the 'Apply to Enclosed Items' command in the pop-up menu at the foot.



One way to customise which columns appear in the Finder's List view is by setting your preference in its View Options.

Alternatively, you can achieve the same change using the contextual menu (Ctrl-click) for the List view's column headers.



How to set a firmware password on my M3 Mac?

> Apple silicon Macs don't have firmware passwords, which are only available on Intel models with their EFI firmware. This is because of their different firmware and Secure Boot mechanism, which protects your Mac better than any EFI password ever could.

How can I set Wallpaper to show my photo library?

> In theory, this is an option available in System Settings > Wallpaper, but at present this doesn't work as intended, at least not on most Intel Macs. Until it's fixed, use one of the other options there that does work correctly.

Change Finder's List view layout

Q The Finder's List view can't remember changed column widths. How can I fix that, and remove the Size column?

by KEITH GIBBINS

A Currently, there doesn't appear to be any way to get the Finder to remember column widths in List views, and you have to adjust each as you need them. Neither do third-party utilities

like Tinkertool seem able to save them for you. You can, though, customise the columns that appear there...

Open a new Finder window and set it to List view. Then use the Show View Options command in the View menu to open and set the window's options, including selecting which columns are shown. Alternatively, you can set this directly in that window, using Ctrl-click-hold on one of the view headers to open a menu containing fields to be displayed.

Why won't my login password work?

Q Although I typed in my password correctly, when I try to log into my M1 iMac, it refuses to accept it. Has it forgotten or corrupted my password?

by STEVE ROWLEY

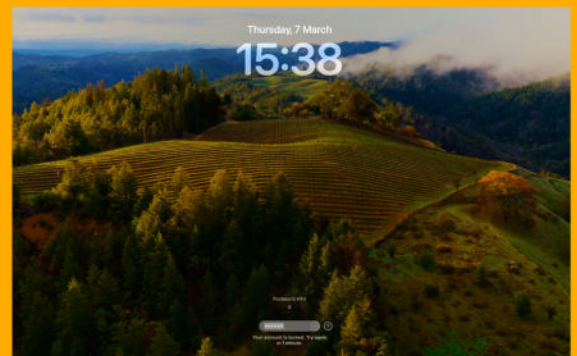
A Because of the way that Apple silicon Macs store and use login passwords, it's far more likely that it's not being entered correctly. Don't keep trying to enter it, though, as your Mac's security system only allows a limited number of attempts to enter the login password, and soon starts to enforce delays, first of a minute, rising to as much as an hour before locking you out. Check the Caps Lock isn't lit, then open the keyboard menu at the

top right of the login screen and ensure you've the correct keyboard set for entering your password.

If those don't fix the problem, and you're being meticulous in entering every character correctly, it's time to look at alternatives, offered by clicking on the '?' inside a circle at the right end of the password entry box. That should show any password hint you set, and may give you the option of resetting your password using your Apple ID and its password, using a Recovery Key if you opted for that, or

restarting into Recovery mode to perform a password reset there.

If you're still stuck after trying these, Apple explains all the options at bit.ly/mac404maclogin.



Don't keep entering a rejected password when trying to log in, as eventually you'll be locked out of your Mac.

Become an **expert iPhone** filmographer

Turn your clips into a slick movie with our
collection of pro shooting and editing tips

Written by George Cairns



Shooting videos on your iPhone is so easy these days that it's tempting to be a bit blasé about it. But with a little know-how, some video editing skills, and additional third-party film-making accessories, you can turn ordinary clips of your pets, friends and holidays into a mini-movie masterpiece. This guide will show you how!

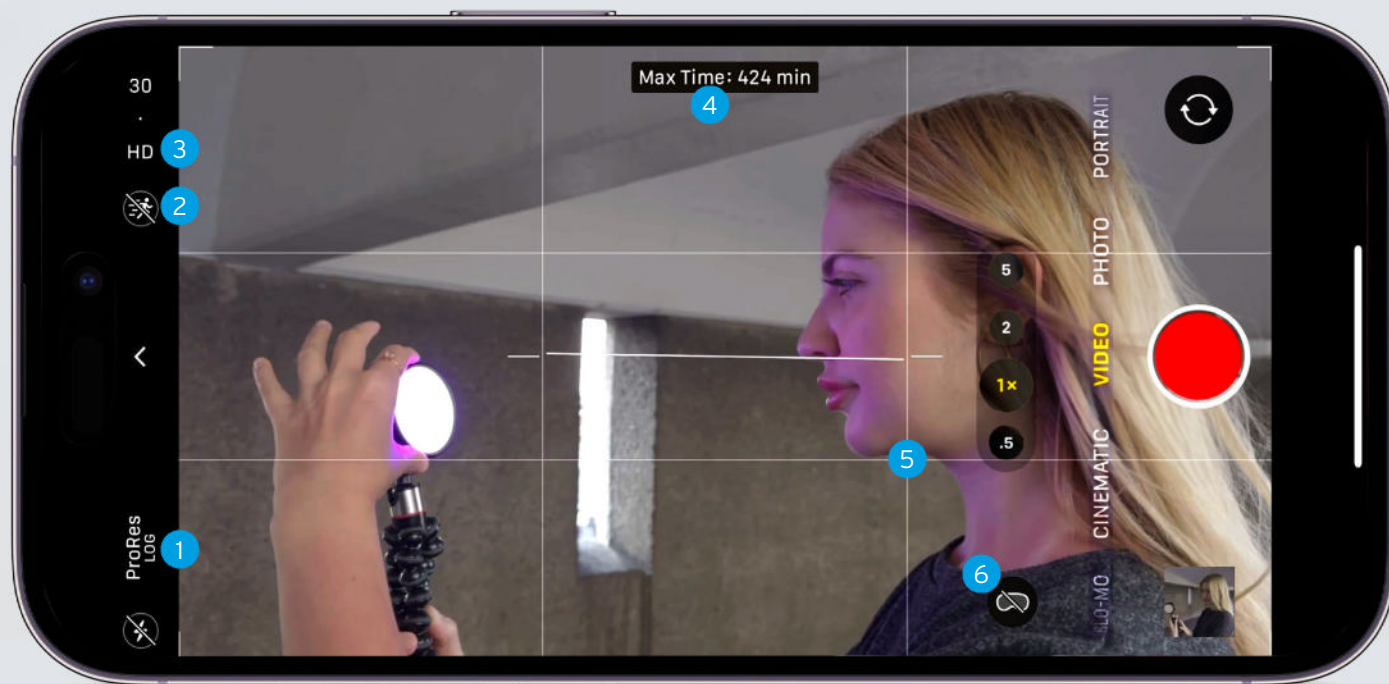
We'll explain how to set up your iPhone to record footage that suits your movie-making requirements, whether

that's capturing 4K clips for sharing as High Definition footage on a widescreen TV, or shooting smaller social media-friendly files that will catch the eye (and elicit 'likes') in your Instagram or X/Twitter) feed.

We'll recommend which iPhone movie formats will give you more control when adjusting colours and tones in the edit, and we'll suggest third-party gadgets, such as wireless mics and LED lights that will elevate your movie making to a more pro level.

We'll explain which Camera app shooting modes can capture gimbal-smooth action without needing a gimbal, plus show you how to add a Hollywood style bokeh (blur) to a clip's background using the Cinematic mode (and even pull focus from foreground to background subjects like a pro camera operator). We'll also demonstrate a variety of video editing techniques that will give your content a more professional look that will impress family, friends and followers alike.

EXPLAINED... Movie-making settings on iPhone >



1 Apple ProRes
> ProRes is a professional video format. The Log colour option captures a wide dynamic range, and gives more editing control.

2 Action mode
> Tap here to toggle on Action mode. This gives you gimbal-smooth footage, counteracting shaky handheld camera moves.

3 Clip resolution
> Tap here to toggle between High Definition (1080x1920) or 4K (3840x2160) resolution clips, the latter takes up more storage.

4 Duration
> ProRes files take up more space than standard clips, so your iPhone estimates how much footage you can capture in this format.

5 Log colour
> Log colour clips look desaturated with a low or 'flat' contrast. You can adjust colour and tone in the edit for a wide range of looks.

6 Spatial video
> On iPhone 15 Pro and Pro Max, tap here to shoot Spatial Video clips that can then be viewed in 3D on an Apple Vision Pro headset.

Make movies with your iPhone – explained!

Make plans, gear up and shoot

Shooting movies on your iPhone can be fun and exciting, and video clips are more likely to catch the eye on a social media feed than still images. As it's ever-present, you can whip out your iPhone and press the Action button (on iPhone 15 Pro) to instantly open the Camera app. If you then press and hold the Action button you'll start recording video. This enables you to capture clips of spontaneous events such as your child's first steps.

However, the best movies should start with a bit of planning ahead (which professional movie makers refer to as the pre-production stage). For example, if you're going to shoot a wedding then



By shooting with an iPhone mounted in a cage, you have more control over camera moves, such as rotating the cage to follow the action.

you might want to consider packing some helpful accessories into a kit bag, such as an iPhone handheld cage. Cages have cold shoe mounts – so that you can clip accessories on – such as a JOBY Beamo LED light to help you capture more detail in gloomy interiors, or a mini directional shotgun mic to capture clearer audio during a noisy party. Check out our top kit recommendations in this spread's Gear Up! section.

Shoot to edit

After the pre-production stage you move onto your movie's recording (or production) stage. Instead of recording the action as one long boring shot with the camera panning wildly back and forth (or 'hose-piping'), break it up into shorter clips that you can edit together to tell a story.

For example, if shooting action (such as a friend performing a parkour move), film a static wide shot of the action first. Then change your camera angle and shot size and ask your friend to repeat the same action. You can then cut from the wide shot to the close-up in iMovie (in the post-production editing stage), and it will look like the action was shot 'live' by two cameras, creating a more professional-looking sequence.



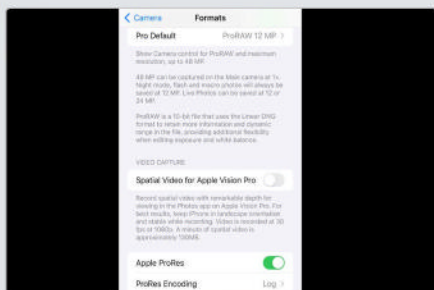
Gear up!

To improve the production values of your footage consider splashing out on these third-party gadgets.

1 The NEEWER iPhone cage (uk.needewer.com) lets you slide your iPhone into a robust aluminium cage. The side handles give you a safer grip on your phone and enable you to perform a range of slick camera moves, from tilts and pans to 180° rotations – perfect for filming a child performing a somersault on a trampoline, for example!

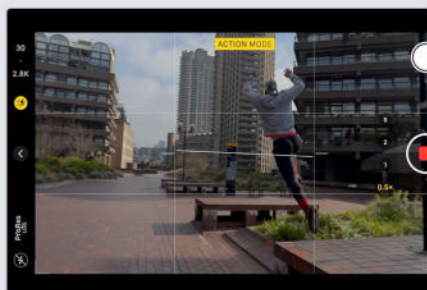
Your iPhone's built-in mic can do a great job of capturing voices from subjects in close proximity, but the

How to Choose the appropriate format and shooting mode >



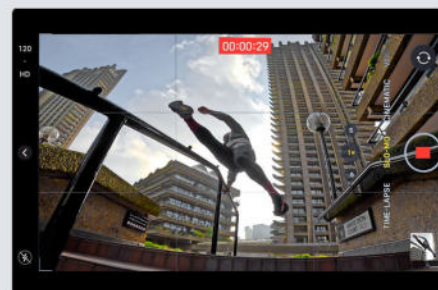
1 Choose ProRes format

For more editing control over colours and tones, use ProRes Log Color format (see the guide on p63), although this takes up more space. Go to Settings > Camera > Formats to turn Apple ProRes on. Set ProRes Encoding to Log.



2 Opt for Action mode

If chasing your kids or shooting a sporting event, set the Camera app to shoot video using the Action mode (see the guide on p63). This processes shaky footage to make it look gimbal-smooth; it works best in brightly lit locations.



3 Slow things down

When shooting sporting action sequences, choose the Camera app's Slo-Mo to slow down time. However, bear in mind that Slo-Mo clips are restricted to smaller sizes of 1080p HD (at 120 fps) or 720p HD (at 240 fps).



sound quality rapidly drops off as your subject gets more distant, plus ambient noise such as traffic can easily make voices inaudible. By purchasing a wireless mic kit like the **2 Saramonic Blink 500 B2+** (saramonicuk.com) you can improve your movie's audio production values. Simply clip the Blink 500 B2+'s small transmitter mic onto your subject's clothing (or attach it via a magnet) and then broadcast their sound wirelessly to a receiver plugged into your iPhone (from up to 150 metres away!). The transmitters have an effective noise reduction feature too. The Blink 500 B2+ kit ships with two receivers - one that's

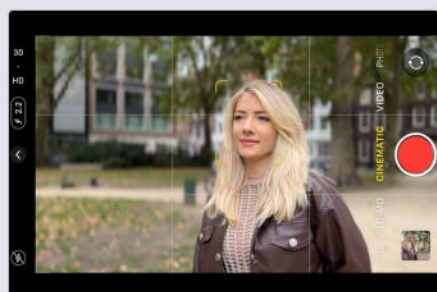
compatible with older iPhone Lightning ports and a second USB-C version that will slot into an iPhone 15 model.

If you are a self-shooting vlogger and want to walk and talk while the iPhone follows your every move then consider buying a gimbal. Your iPhone is quite capable of shooting gimbal-smooth footage thanks to its Optical Image Stabilisation feature, but gimbals do more than simply keeping the iPhone's movement looking stable.

3 The DJI Osmo Mobile 6 (dji.com) uses a free app to make the gimbal-mounted iPhone pan and tilt to keep your face in shot as you walk and talk. This is

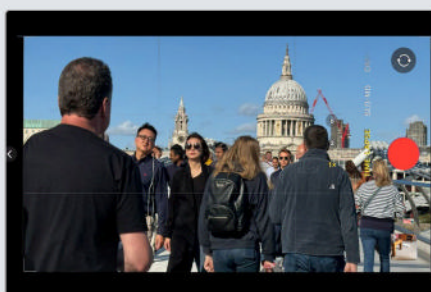
like having your own camera operator on location! You can also plug a Blink 500 B2+ receiver into your iPhone while it is mounted on the DJI Osmo Mobile 6 so your clip will feature camera moves and you'll sound great!

Hitting the beach with your family offers plenty of movie opportunities, and while an iPhone 15 is water-resistant for up to 30 minutes, you'll be safer popping it inside a waterproof casing like the **4 JOBY SeaPal** (joby.com). If you drop your 'naked' iPhone in the ocean it will be a challenge to locate it, but inside the SeaPal it'll be much easier to rescue!



4 Shoot in Cinematic

Movie cameras can add background blur (bokeh) to draw attention to the foreground subject. To mimic this look, shoot your subject in Cinematic mode. You can adjust a Cinematic mode clip's blur amount and focus point in the edit.



5 Make time fly

To add a variety of movement, pop your iPhone on a mini tripod and set it to Time-Lapse shooting mode. Leave it recording for a few minutes. You'll capture moving subjects, such as people and clouds, whizzing by at high speed.



6 Activate Spatial Video

iPhone 15 Pro owners can activate Spatial Video for Apple Vision Pro in the Format menu. This uses the Main and Ultra-Wide cameras to record depth when you shoot in landscape orientation. Tap the goggle-shaped icon to activate this.

Editing in iMovie on Mac

Turn your long rambling clips into a slickly-edited story

Your iPhone will soon become full of video clips that you can find quickly in the iPhone Photos app by tapping on Albums and scrolling down to Videos.

Tap to view a clip. You can then tap Edit to apply the same editing tools that you'd use to adjust a photo's colours and tones to a clip. In addition, Photo's video-editing tools enable you to drag trim handles at the start and end of a clip to cut to the best bit. This process also makes the clip shorter and easier to upload if you want to share it to social media. After editing a single clip, tap

Done, choose 'Save Video as New Clip', then tap Share to share it via Mail, Instagram, and so on. Sharing a single short clip from the Photos app is fine, but you can do so much more with your valuable video assets by using iMovie to turn a collection of individual clips into a professional-looking story, complete with titles, transitions and music.

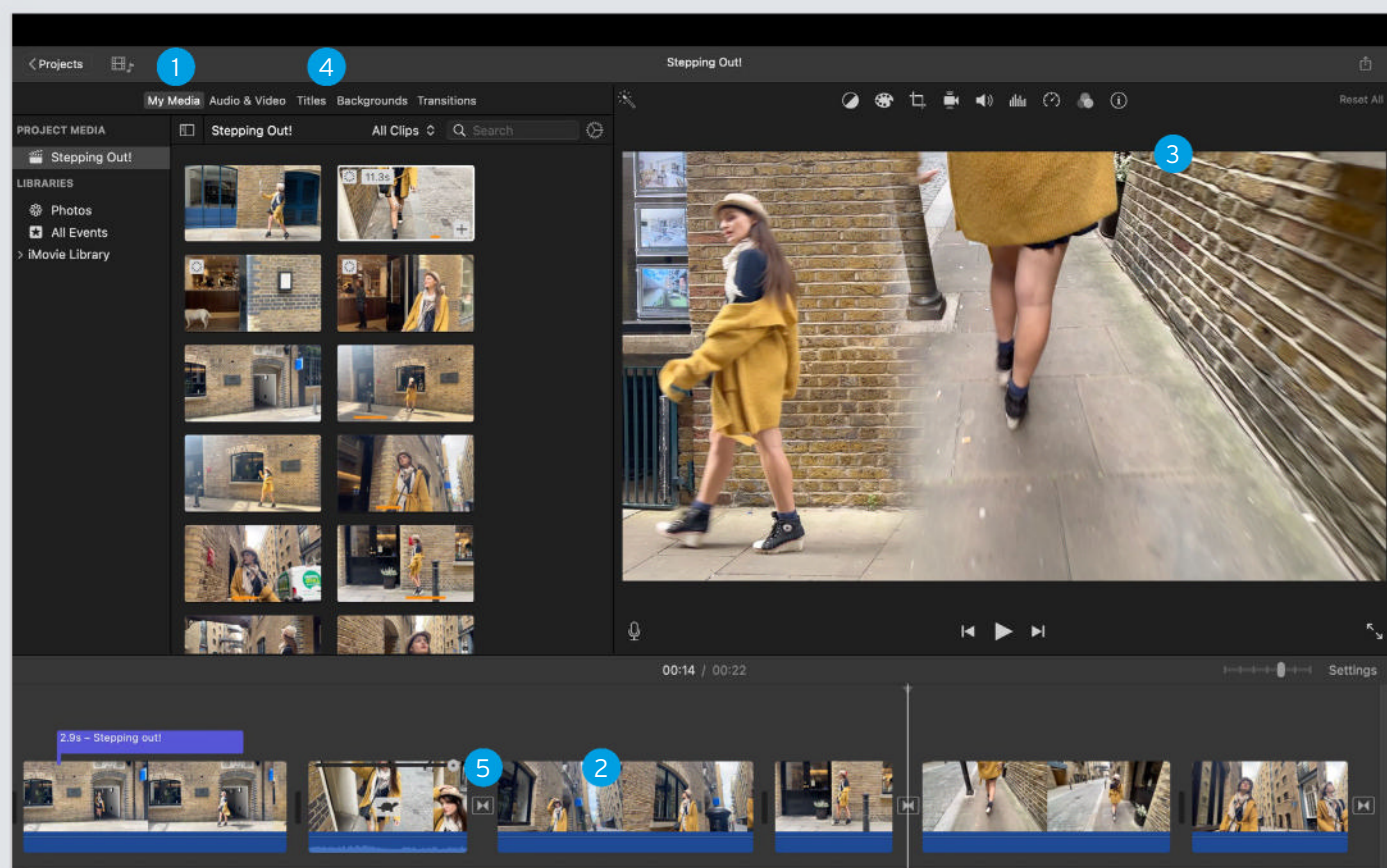
Gather your clips

iMovie is Apple's free NLE (non-linear editor), that enables you to pop clips into a timeline, trim their duration and swap their running order (hence the term non-linear) to tell a story. You should

have iMovie as a built-in app on your iPhone (if you don't have it, download it for free via the App Store.) Editing clips on the iOS version of iMovie is straightforward, but the macOS version has extra tools (such as ways to improve problems with audio tracks), and you have more screen space to work in on an iMac or MacBook.

On these pages, we'll explain how to transfer clips from iPhone to Mac, and how to use iMovie's basic non-linear editing tools to create a tightly edited and smooth-flowing sequence to share with family and friends. We'll then explore more expert techniques on p68.

EXPLAINED... The iMovie interface >



1 My Media panel
> All imported iPhone clips are visible as thumbnails. Swipe the cursor across a thumbnail to preview its content in the viewer.

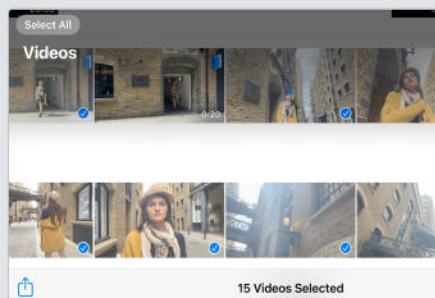
2 Non-linear timeline
> The timeline enables you to arrange your clips in any order (hence the term 'non-linear'). You can also trim each one's duration.

3 Viewer
> Here you can see your movie sequence starting to take shape. Above the viewer section, you'll find extra tools that we'll explore on p68.

4 Titles
> The Titles browser is packed full of animated titles. You can drag a title above a clip in the timeline and modify it in the viewer.

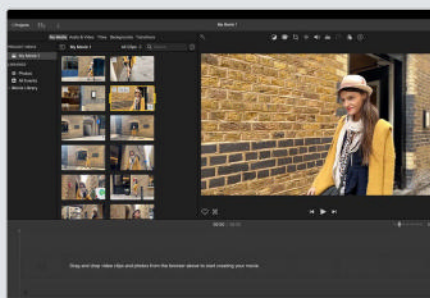
5 Transitions
> Transitions provide eye-catching ways to wipe, mix, fade, and so on, from one clip to the next instead of a simply using a series of abrupt cuts.

How to Transfer clips from iPhone to Mac >



1 AirDrop your clips

In Photos, go to the Videos album. Tap Select, then select the clips you want (a blue tick will appear on each). Tap Share, then AirDrop. Tap your Mac's AirDrop icon. The clips will be sent to your Mac's Downloads folder.



2 Import your clips

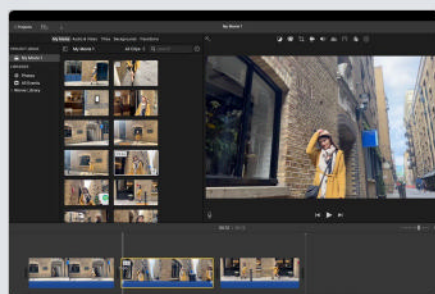
Launch iMovie on Mac. Click on the Projects tab, then Create New. Choose Movie > File > Import Media. Browse to Downloads, hold Shift and click to select movies. Click Import > Selected. The clips will appear in iMovie's My Media browser.



3 Import via USB-C

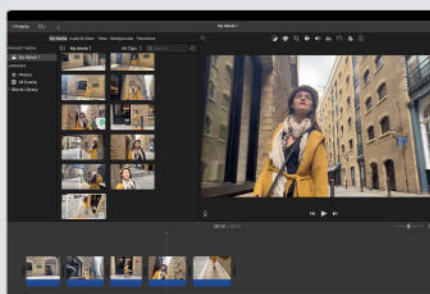
If you have an iPhone 15, plug it into your Mac via USB-C. In iMovie, choose File > Import Media. In the Import window, click the iPhone icon. Hold Cmd and click to choose multiple clips from your iPhone Photos Library. Click Import Selected.

How to Make some basic edits >



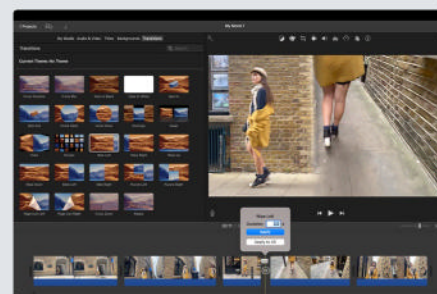
1 Add and trim

Move the pointer across a thumbnail in My Media to preview it. Drag a clip to the timeline (or press W). Place the pointer at the start/end of a clip to activate Trim. Drag to trim the clip / make the action start or end at a specific point.



2 Change order and angle

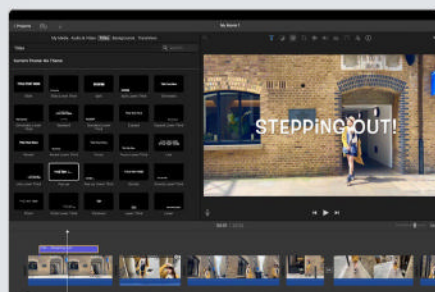
Drag and drop to swap the timeline's clip order to help the story flow. Cutting from one clip's camera angle to one from a different angle adds variety. Press Shift+Z to make the timeline zoom out to show every clip that you've added.



3 Add a transition

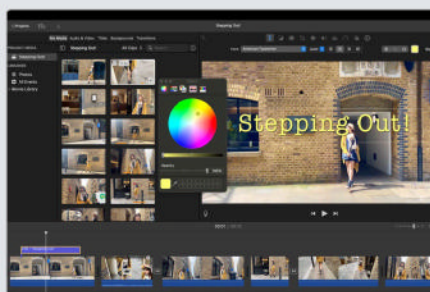
Click on the Transitions browser. Move the pointer along a transition to preview it. Drag a transition between two clips in the timeline. Tap the Space bar to preview it. Double-click the transition's icon to increase its duration.

How to Export and share your finished film >



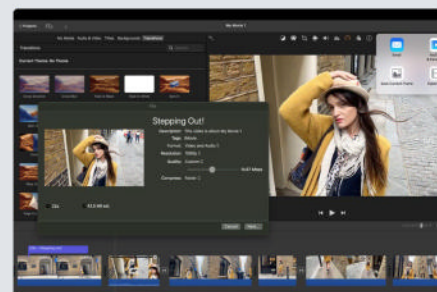
1 Add a title

After choosing your clips' running order, trimming their duration and adding transitions, add some titles. Click on Titles. Move the pointer along a thumbnail to preview the animation, then drag a title above a clip in the timeline.



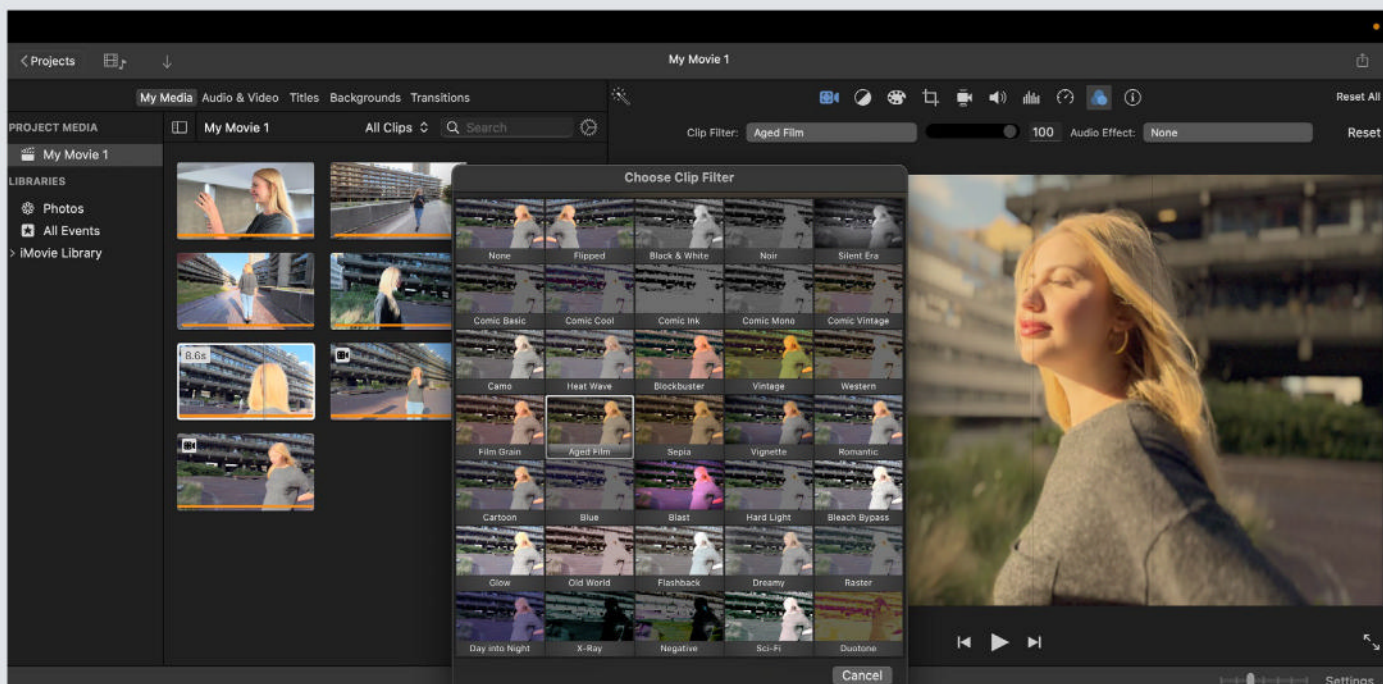
2 Customise the title

Double-click on the title bar in the timeline. Editing tools will appear in the viewer. Choose a different font for the title. You can also adjust font size, turn it bold, or add an outline. Click the Colors button for a more eye-catching colour.



3 Share your clip

Click the Share button. Choose 'YouTube & Facebook' to create a low-res 640x350 file that's easy to upload. For higher-quality movies, choose Export File. You can then create full 1080p Full HD files that will look great on a TV.



Advanced editing in iMovie

Add grading, special effects, and enhance audio tracks

Once you've edited rambling raw footage into a short, slick sequence - complete with titles and transitions - you can add an extra level of post-production polish to make your show stand out from the social media crowd.

Due to different lighting scenarios, such as sun and shade, some clips might suffer from colour casts (such as a cold blue or green tint appearing in certain shots). You may even notice a finger partially obscuring a corner of the frame

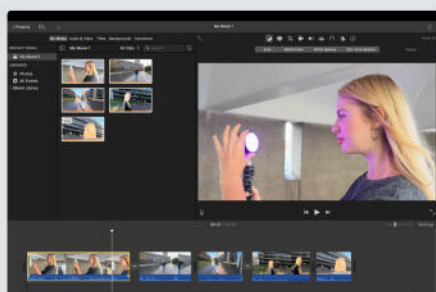
(a common occurrence when holding your iPhone!) Fortunately, iMovie has all the tools you need to counteract problems with composition, colour and tone, as we'll demonstrate.

You can also take your picture adjustments a step further and change the look of a clip more creatively using grading tools such as Filters. Filters can change the mood of a clip by adjusting colours and tones in just one click. iMovie will even take Log colour clips straight from your iPhone and improve

their colour and contrast automatically before you make more creative adjustments.

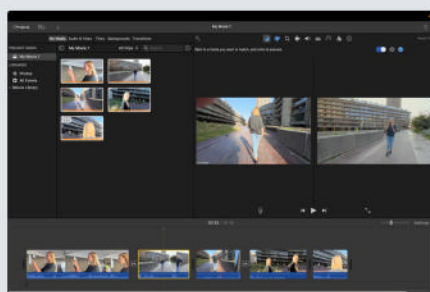
We'll also show you how to adjust the properties of a Cinematic mode clip to change the strength of its blur, and show you how to pull focus from foreground to background subjects like a professional camera operator. Then we'll finish off with some eye-catching layer-based effects, such as picture-in-picture combinations, and even indulge in some green-screen compositing!

How to Adjust colour, tone and composition >



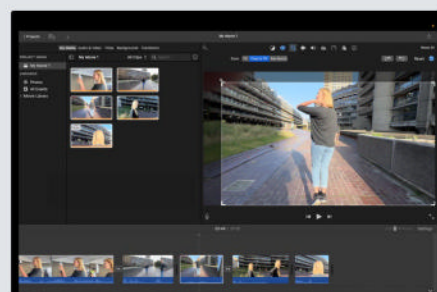
1 Use Log colour

In the guide on p63, we featured a clip shot in the iPhone's Log colour format. It displayed drab colours and flat tones. When you import a Log colour format clip into iMovie, it automatically boosts the clip's saturation and contrast.



2 Warm up cold colours

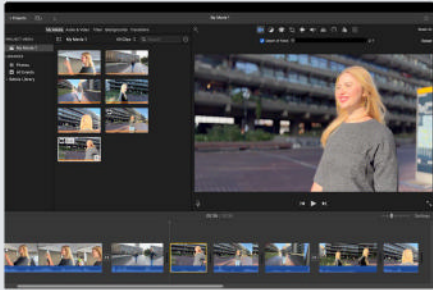
Clips shot in the shade can look cold (blue). To warm them up, click on Color Balance above the viewer, then click Match Color. Browse to a sunnier clip in the timeline and click on it to transfer its warmer colours to the 'cold' blue shot.



3 Correct composition

One of our example clips features a finger obscuring the lens. To exclude this, click on the Crop icon above the viewer. Click Crop to Fill. Drag the top-left corner handle down to crop out the unwanted finger. Click the tick to apply the change.

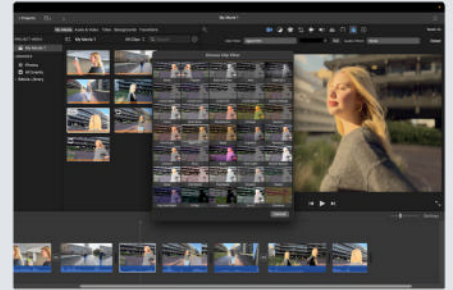
How to Get your movie the Hollywood look >



1 Add a background blur
When working with a Cinematic mode clip, you'll see an extra camera icon appear above the viewer at the top left. Click on it. Tick the 'Depth of Field' box to add a background blur. Drag the adjacent slider left to increase the strength of the background blur.



2 Change the focus
To change the focal point of the clip, click on the background of a specific frame. A yellow reticle will indicate that the background is in focus. When you play the clip, the camera will then change focus from the foreground subject to the background on the chosen frame.

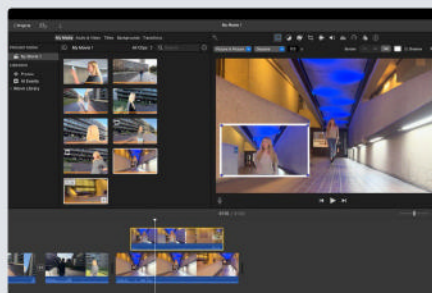


3 Add a filter
To creatively grade a clip's colours, click on the Clip Filter icon above the viewer. Then click the Clip Filter button. A collection of 34 filter thumbnails will appear. Hover the pointer over a thumbnail to preview its look. Click to apply a filter to the clip.

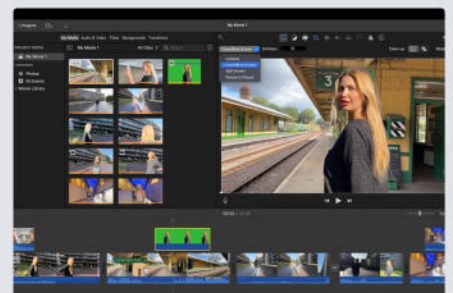
How to Add extra effects >



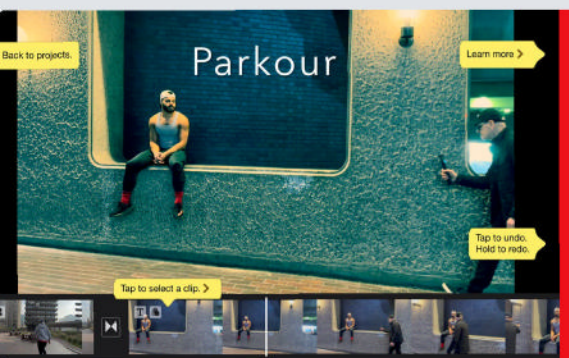
1 Add sound effects
The Clip filter featured in the previous step also gives you access to a collection of creative audio effects. Click the Audio Effect button and place the pointer on an effect's thumbnail to preview how it will alter a clip's sound. Click the thumbnail to apply the effect.



2 Try Picture in Picture
If you place one clip on a layer above another clip in the timeline, you can combine the overlapping clips in a variety of creative ways. Click on the top layer clip, then click on the Video Overlay icon above the viewer. Choose an option such as Picture in Picture.



3 Use compositing tricks
If you shoot against a green or blue backdrop (such as a curtain or a large piece of card), you can use the Video Overlay icon's Green/Blue Screen menu option to replace the top layer clip's coloured backdrop with the background from the clip on the layer below.



Edit your movie on the iPhone

Edit and share on the go! >

If you're in a rush to get a collection of clips edited and shared, use the iOS iMovie app to make basic edits such as trimming clips, swapping running order in the timeline, and adding titles and transitions. You can also add filter effects in a single tap for a more creative look, and adjust the speed of clips shot in Slo-Mo mode. The iMovie app offers pop-up help labels that explain how to perform a range of editing techniques. Once you've finished editing your movie, tap Done, then tap Share. Tap Share Video to export it via AirDrop, Mail, or send it to your favourite social media site.

Best Watch Apps

Your Apple Watch can do some incredible things. But to do them, you may need a little help...

Written by David Crookes

The Apple Watch has an **abundance of apps**. No, really, believe us, it does. While it may feel at times that the device is not as well served as the iPhone, iPad and Mac (and, in truth, it isn't), the App Store is actually very healthy these days with many innovative and talented developers making good use of the wearable's capabilities.

The result of this activity is a wealth of apps across a wide range of categories which put a lot of power on your wrist. The majority of them come as part of a package – an additional goodie when you download an app to a paired iPhone. In this case, the Watch app will usually automatically install on your Watch. If it

doesn't, just launch the Watch app on your iPhone, tap the My Watch tab, scroll down and tap Install next to any app you want to appear on your wearable.

Many other apps can be downloaded directly so long as you're running watchOS 6 and above – the version that introduced the Watch's own App Store. To browse these offerings, just launch the App Store app and scroll through the recommendations or tap search and use the keyboard, Scribble or Dictation to enter the name of an app and tap Get to install it. If you go to the bottom of the App Store's home page, you can check past purchases, view subscriptions and see which apps need updating.





Strava: Run, Bike, Hike

- > **Free** (with IAPs)
- > **FROM** strava.com
- > **NEEDS** watchOS 8 or later



Rather not take your iPhone on a run?

Strava is a standalone app so you don't have to. It uses GPS to track your runs, hikes, bike rides, swims and more, recording data straight to the watch and delivering easily readable insights such as your average pace to help you improve.

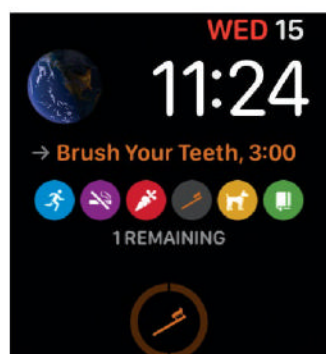
Health & fitness

Stay focused on your goals and improve your well-being

Along with many other life hacks, it's no surprise that there are loads of health and fitness apps for your Apple Watch.

As you're likely aware, the Watch has heaps of features that will enable you to track your activity, workouts and well-being and, depending on the model, can also measure your blood oxygen, generate an ECG (electrocardiogram), track how well you sleep and check for high, low or irregular heart rhythms.

Data can be checked within the Health app, but you can make better use of it by installing a bunch of third-party options. Some are designed to motivate you, others seek to inspire, while many allow you to better analyse info so that you can make more informed choices.



Streaks

- > **£5.99**
- > **FROM** streaks.app
- > **NEEDS** watchOS 7 or later



It's hard to turn a desire into a habit but this app will nudge you in the right direction.

Set up as many as 24 tasks - whether that's a prompt to brush your teeth or eat some fruit - then indicate when you'll need reminding and Streaks will motivate you to stick to your plan.



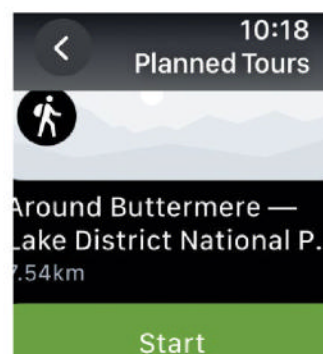
Tempo - Runners' Workout Stats

- > **Free** (with IAPs)
- > **FROM** indie.sh/tempo
- > **NEEDS** watchOS 9 or later



This runner-designed app is worth the cost for its brilliant tracking metrics.

You'll need an active premium subscription, but you'll be able to track your distance totals from your wrist and see them as a complication on your Watch face.



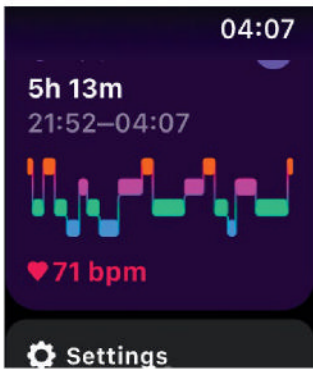
Komoot

- > **Free** (with IAPs)
- > **FROM** komoot.com
- > **NEEDS** watchOS 7.4 or later



Whether you've planned your own adventure or chosen one of Komoot's, you can navigate from your Watch.

There's a choice of hiking, mountain biking, road cycling and bike touring routes, and tours can be saved for offline navigation and you'll get turn-by-turn notifications.



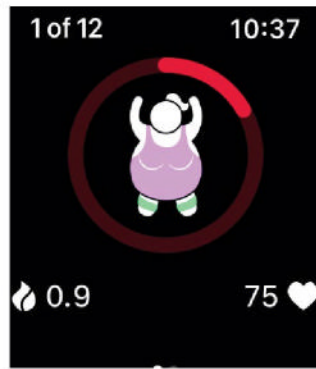
Pillow: Sleep Tracker

- > **Free** (with IAPs)
- > **FROM** pillow.app
- > **NEEDS** watchOS 6 or later



A good night's sleep is vital to your health so ensure

you're getting quality shut-eye with this stat-packed app. Wear your Watch to bed and it'll detect and analyse how long and how deeply you slept. You can instantly check data using one of Pillow's Watch faces.

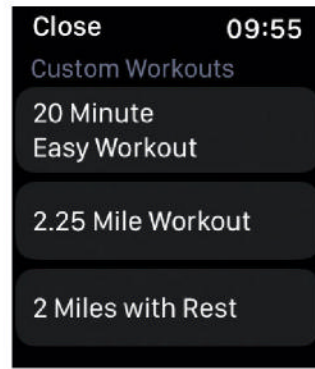


CARROT Fit

- > **£4.99** (with IAPs)
- > **FROM** meetcarrot.com
- > **NEEDS** watchOS 3 or later



CARROT Fit combines fitness stats with snarky comments - struggle to get fit and the surprisingly motivating AI bot won't hold back. Offering seven-minute workouts, it'll accurately mop up your vitals and let you know when you're done (literally and figuratively). Don't quit!



ASICS Runkeeper

- > **Free** (with IAPs)
- > **FROM** runkeeper.com
- > **NEEDS** watchOS 8 or later



Runkeeper's standalone Watch app is like a simplified version of its iOS cousin which makes it feel more immediate. As you run, it'll use haptics to let you know when you reach set stages and it'll also let you know your current and average pace. Custom workouts are a tap away.



Headspace

- > **Free** (with IAPs)
- > **FROM** headspace.com
- > **NEEDS** watchOS 9 or later



If you're looking to improve your mental health, the courses and guidance on offer from Headspace: Meditation & Sleep can prove invaluable. The subscriptions are costly, but the Watch app gives you easy access to the sessions, so all you need to do is connect headphones and tap to ease your stress.

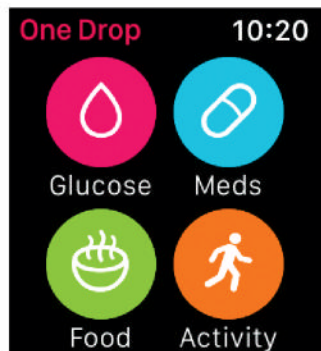


Air Matters

- > **Free** (with IAPs)
- > **FROM** air-matters.com
- > **NEEDS** watchOS 7 or later



If you're venturing out and about and you have allergies or a condition such as asthma, it's a good idea to keep a check on the air quality. Air Matters will notify you of the real-time risks from your wrist, using colours so you can immediately see which levels are of concern.



One Drop

- > **Free** (with IAPs)
- > **FROM** onedrop.today
- > **NEEDS** watchOS 7 or later



It's important to manage diabetes, prediabetes, blood pressure and cholesterol. By using your Watch to input blood sugar, medications, activity and food intake, One Drop Diabetes Management helps you track your range and seven-day average. You can also connect to OneDrop's glucose meter.



5 best travel apps

Apple Watch is the perfect travel companion, enabling you to organise your trip, navigate your way around and easily communicate with local people. Flighty (Free, IAPs), for example, shares flight details and alerts you to delays, while Citymapper (Free, IAPs) lets you discover the best routes around more than 400 cities. With iTranslate

Converse (Free, IAPs), you can hold natural conversations by picking a language and tapping to speak, and with Elk (Free, IAPs) you can turn the Digital Crown, enter numbers and make rapid currency conversions. Unsure if today's a good day? Check snarky CARROT Weather (Free, IAPs) and its host of useful complications.

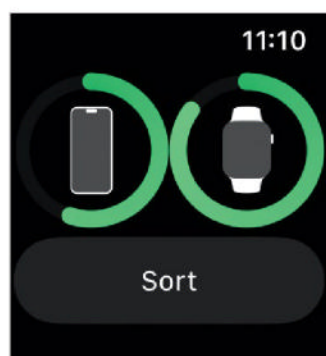


Organisation & relaxation

Your Watch can make your life easier all-round

Your Apple Watch is effectively a mini-computer, so you can harness its ever-present nature to remove some of the stresses and strains of life. You can take the sting out of your daily chores through better organisation. Or speed up laborious processes and even make use of Apple Watch to aid you with your work.

Of course, all work and no play will make anyone a bit dull but, thankfully, your Watch can also be used to engage in a bit of fun to help you unwind. Admittedly, the screen is a bit too small for a truly satisfying gaming experience (despite gems such as Ping Pong - Watch Retro Game (Free, IAPs) and Star Duster (£1.99) but there are plenty of other entertaining apps to be found.



Cloud Battery

> **Free** (with IAPs)
> **FROM** alanyan.ca
> **NEEDS** watchOS 7 or later



Not sure if your iPad, trackpad or Mac needs juice?

Get Cloud Battery on your Watch and you can monitor the battery levels of Apple devices linked to the same iCloud account. As well as being able to do this within the app itself, you can also assign devices to a complication.



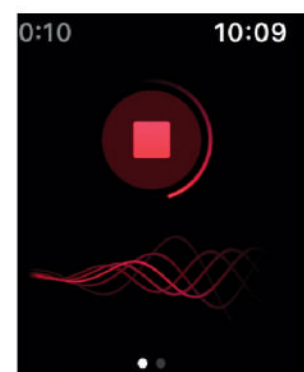
BFT - Bear Focus Timer

> **£1.99**
> **FROM** bearfocustimer.com
> **NEEDS** watchOS 6 or later



Work for too long a period and your mind can wander, making you less productive.

Step forward a fun, friendly cartoon bear to help you focus. After setting work and break times, you'll be praised for working hard and nudged when you need a rest.



Just Press Record

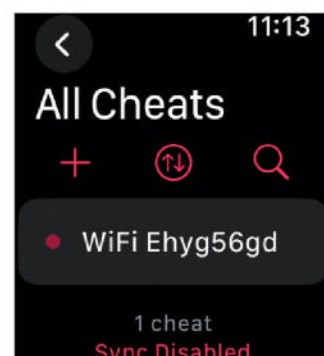
> **£4.99** > **FROM** openplanet software.com

> **NEEDS** watchOS 8.7 or later



For utter simplicity, Just Press Record takes some beating.

It does exactly as the title suggests: press a button (whether in-app, a complication or a Siri shortcut) and record unlimited audio. Recordings are then transferred to your iPhone, transcribed and synced via iCloud.



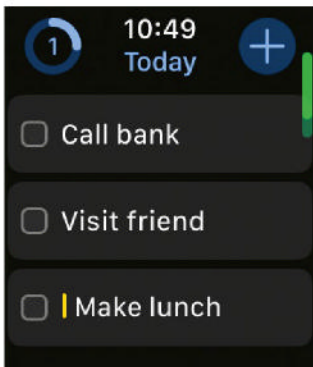
Cheatsheet - Quick Note Widget

> **Free** (with IAPs)
> **FROM** overdesigned.net
> **NEEDS** watchOS 8 or later



If you need to store and access nugget-sized notes with

the minimum of fuss, Cheatsheet is the way to go. Jot down your licence plate, a code or whatever else and view them in-app or as a complication. iPhone syncing requires Cheatsheet Pro.



Things 3

> £9.99

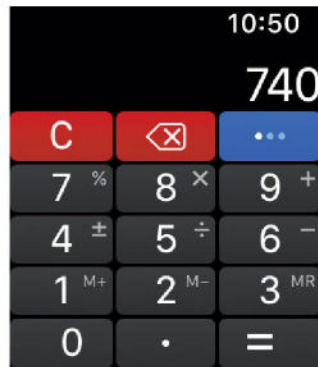
> FROM culturedcode.com

> NEEDS watchOS 8 or later



The brilliant Things 3 is designed to work in conjunction with your iPhone app.

You can tick off your accomplishments, postpone tasks, add new ones verbally and receive notifications. The app also keeps a check on the number of tasks you complete each day to motivate you to keep going.



PCalc

> £9.99

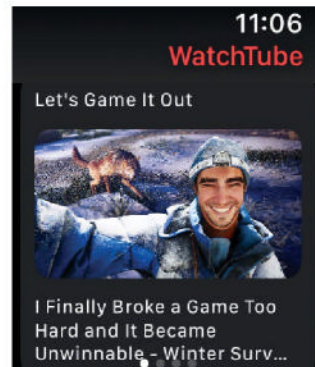
> FROM pcalc.com

> NEEDS watchOS 7 or later



Yes, it's costly and, yes, there's already a Calculator app

built into the Watch but PCalc is still worth considering. It comes with a heap of functions, lets you quickly make unit conversions and enables you to calculate tips with ease. If you're not sure, you can try the free PCalc Lite for a taster.



WatchTube

> Free

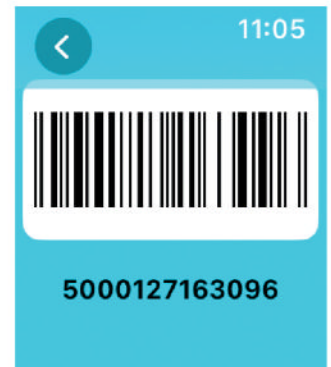
> FROM watchtube.app

> NEEDS watchOS 8 or later



Forget the big screen: the latest videos should be enjoyed on the tiniest display possible. Probably.

Okay, so this app could be dismissed as a novelty but WatchTube is still surprisingly feature-packed: subscribe to channels, see your viewing history and see which videos you liked.



Loyalty Card Wallet - Barcodes

> Free (with IAPs)

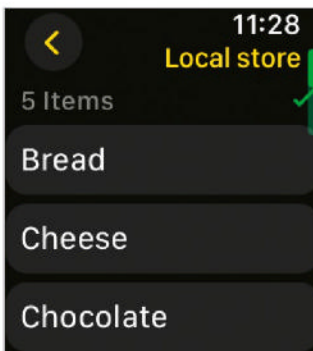
> FROM smallcolossus.com

> NEEDS watchOS 9 or later



Some store reward or membership cards are physical

or don't have Apple Wallet options. That means taking a screenshot of their barcodes/QR codes or opening individual apps. Import them into Barcodes and you can store them in one place, ready to present at the till.



Grocery - Smart Shopping List

> Free (with IAPs)

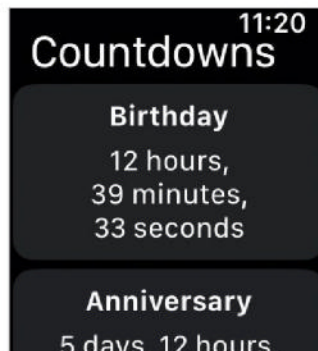
> FROM smartgrocery.app

> NEEDS watchOS 6 or later



Grocery remains an invaluable shopping aid for one simple reason...

It doesn't merely allow you to view your shopping list, it actually learns the order you check off items. So the next time you shop, the list should better reflect the store's layout.



Countdowns - Event Countdown

> Free (with IAPs)

> FROM countdowns-app.com

> NEEDS watchOS 8 or later

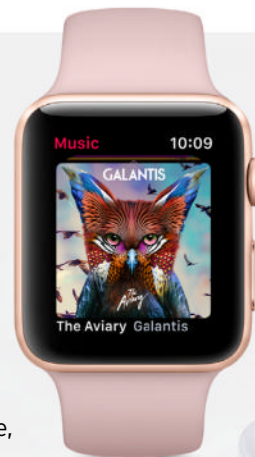


Once you've set a countdown timer on your iPhone, you can check the Countdown Watch complication to see how long there is to go.

You can set timers for anything - wedding anniversaries, birthdays, holidays, the day you leave your job and so on.

5 best audio apps

Connect a pair of headphones to the Apple Watch and you've got a jukebox on your wrist. TuneIn (Free, IAPs) offers radio stations from across the world, while Spotify (Free) provides a great alternative to Apple Music - you'll just need to go to Spotify's website to sign up or buy a subscription. For a more personalised experience, try Endel (Free, IAPs) which uses artificial intelligence (AI) to create sounds using inputs such as your heart



The Apple Watch is the perfect companion for enjoying your music on the move.



rate and location. Then check Audible (Free) to hear your favourite books. Enjoy podcasts? Try Overcast (Free, IAPs) which has Voice Boost for greater clarity and Smart Speed to shorten silences without making playback sound strange.

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> A truly exceptional product. Award given solely at the discretion of the editor.



> The best example of its kind when pitted against comparable products.



> A brilliant thing



> Strongly recommended



> Worth considering



> Notable flaws



> A waste of your money



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MacBook Air 13-inch (2024)

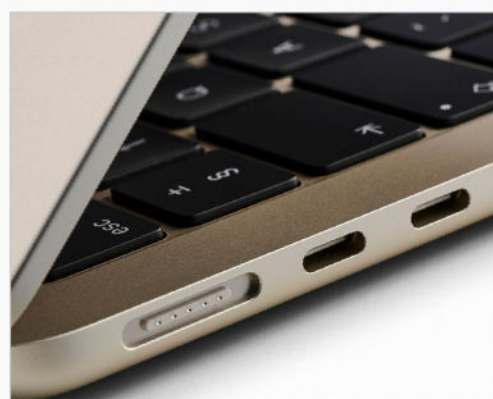
It's little and good, but is there any more to it than that?

> From **£1,099** > **FROM** apple.com/uk > **FEATURES** Apple M3 chip, 8GB unified memory (16GB/24GB available), 13.6in Liquid Retina display (2560x1664), 256GB storage (512GB/1TB/2TB available), Wi-Fi 6E (aka 802.11ax Wi-Fi), Bluetooth 5.3, 2x Thunderbolt/USB 4 ports, MagSafe 3, 3.5mm headphone jack

The MacBook Air 13in remains a joy to use on space-constrained spaces on trains and planes

When the MacBook Air first made its debut in 2008, it was remarkable for both its light weight and compact design - and that's something that's continued into the Apple silicon era, even if the original's wedged-shaped design has given way to something more MacBook Pro-like in 2022's M2 redesign and this year's M3. Measuring just 30.41x21.5x1.13cm and weighing 1.24kg, the MacBook Air 13in remains a joy to use when commuting on space-constrained spaces on trains or planes, even if the arrival of the 15-inch version in June last year has overshadowed it somewhat.

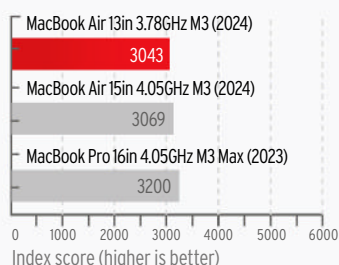
This time around the MacBook Air 13in line-up starts at £1,099 for a version with an 8-core CPU/8-core GPU Apple silicon M3 chip with 8GB of unified memory and 256GB of storage; rises to £1,299 for an 8-core CPU/10-core GPU model with 512GB of storage onboard; and tops out, in standard guise, with a 16GB memory model for £1,499. Like the



Like the bigger 15-inch model, the 13in MacBook Air provides you with MagSafe 3 and two Thunderbolt ports.

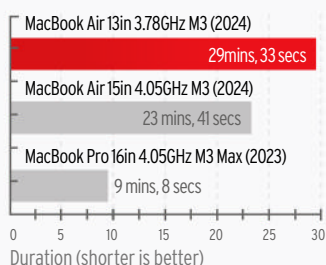
15-inch, the MacBook Air 13in can be configured with up to 24GB of unified memory and up to 2TB of SSD storage. You can also upgrade the power supply from the stock 30W USB-C adaptor to either a 35W Dual USB-C adaptor or a 70W one. Max out the MacBook Air 13in with all the trimmings and you'll pay £2,299.

Benchmarks Our analysis explained >



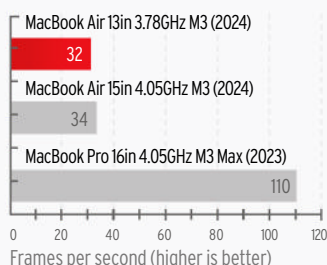
GEEKBENCH 6 SINGLE-CORE TEST

> This tests the capability of a single processor core. Many more common tasks on a Mac will only use a single core at a time. Geekbench 6 is a universal app running on Sonoma.



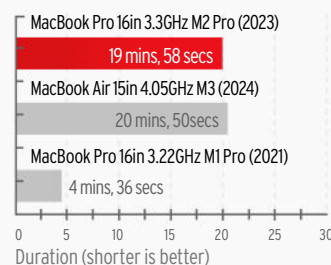
HANDBRAKE VIDEO ENCODING

> We transcode a Blu-ray-quality video file into H.264 format using HandBrake to test the multicore processor performance. Handbrake is available as a universal binary.



RISE OF THE TOMB RAIDER (1920X1200)

> For a real-world gaming test, we use the benchmarking tool in this game, with the graphics quality set to High and the resolution set to 1920x1280. Not Apple silicon native.



DAVINCI RESOLVE

> In Blackmagic Design's editing tool for video professionals, we exported an effects-laden, 2.5-minute project to the H.264 format. The latest version of the app (Version 18.6) runs natively on Apple silicon Macs.



Although there was some variability across our benchmark tests, the new 13-inch MacBook Air impresses.

The MacBook Air 13in's specs are largely identical to its bigger sibling's with MagSafe 3, two Thunderbolt/USB 4 ports and a 3.5mm headphone jack, as well as Wi-Fi 6E and Bluetooth 5.3. The smaller screen gives you slightly fewer pixels to play with at 2560x1664, although it has the same display density at 224 pixels-per-inch (ppi) and 500 nits of brightness. Also, like its bigger sibling, the MacBook Air 13in has incredibly long battery life: up to 18 hours during Apple TV app streaming playback or 15 hours when wireless web surfing.



We're fans of the Magic Keyboard's flat, square keys, and even bigger fans of the fingerprint-reading power button.

Performance

When it comes to getting stuff done, the MacBook Air 13in is quite the mini-powerhouse. With the M3 on board, it makes light work of everyday tasks, feeling equally as responsive as the 15-inch, although there are differences when under sustained pressure. In Geekbench 6, the 8-core CPU/10-core GPU model on test recorded an average score of 3,043 points in single-core and 12,061 in multi-core benchmarks. And in Davinci Resolve 18, it rendered our effects-laden video in 19 mins 58 secs vs 20 mins 50 secs on the 15-inch.

In Handbrake, the MacBook Air 13in took 29 mins 33 secs to transcode an hour-long video, compared to 23 mins 41 secs for the 15-inch; and in Shadow of the Tomb Raider, it averaged 32 frames per second (fps) vs the 15-inch's 34fps.

As with the 15-inch, there was quite a lot of variability in the benchmarks with the 13-inch struggling at times under sustained heavy load - at one stage achieving just 21fps in Tomb Raider, and taking 28 mins 13 secs in Davinci Resolve. None of this should detract though from our overall impression of an incredibly impressive notebook that's the best compact MacBook Air yet. **Rob Mead-Green**



MacFormat VERDICT

> A beautifully made notebook that's both light to carry and light on its feet.



- ⊕ Ultra-compact design
- ⊕ Premium build
- ⊕ M3 performance
- ⊖ Some slow downs under heavy load

MacBook Air 15-inch (2024)

Can Apple's M3 chip make its biggest consumer notebook even better?

> From **£1,299** > FROM apple.com/uk > **FEATURES** Apple M3 chip, 8GB unified memory (16/24GB available), 15.3in Liquid Retina display (2880x1864), 256GB storage (512GB/1TB/2TB available), Wi-Fi 6E (aka 802.11ax Wi-Fi), Bluetooth 5.3, 2x Thunderbolt/USB 4 ports, MagSafe 3 port, 3.5mm headphone jack

The new 15in MacBook Air promises to be 60% faster than the M1 Macbook Air

Nine months after Apple first introduced the 15-inch MacBook Air, its successor is here – and this time it's not only £100 cheaper than before to start, but it also comes with an Apple silicon M3 chip on board. Updated alongside the 13-inch MacBook Air (see p78), the new model promises to be 60% faster than the M1 MacBook Air (2020) and 13 times faster than the last of the Intel-powered MacBook Air models, making it quite the upgrade.

As before, the M3 MacBook Air is available in four different finishes (Silver, Starlight, Space Grey and Midnight) and three standard configurations. Prices start at £1,299 for a 15-inch MacBook Air equipped with an 8-core CPU/10-core GPU Apple silicon M3 with 8GB of unified memory and 256GB of solid-state drive (SSD) storage; rise to £1,499 for a mid-tier version with identical specs but 512GB of storage; and top out at £1,699 for a model with 16GB of unified memory and 512GB of storage.

You can, of course, customise your 15-inch MacBook Air to suit your needs by delving into the build-to-order options. These include adding either 16GB or 24GB of unified memory, 512GB, 1TB or 2TB of storage and upgrading to a 70W USB-C power adaptor (standard configurations come with a 35W Dual USB-C

adaptor). The maxed-out version with 24GB of unified memory, 2TB of storage and a 70W power adaptor will cost you a cool £2,499 – although if you're thinking of spending that kind of money, you might want to consider upgrading to a 16-inch MacBook Pro instead, which comes with a 12-core CPU/18-core GPU Apple silicon M3 Pro chip, 18GB of unified memory and a 512GB SSD for just £100 more.

The MacBook Air 15in (2024) is otherwise largely unchanged from last year, with a super-slim aluminium unibody (measuring 34.04x23.76x1.15cm and weighing 1.51kg), a gorgeous 15.3-inch Liquid Retina display with True Tone and 500 nits brightness and a handful of ports: two Thunderbolt/USB 4 and MagSafe 3 on the left-hand side and a 3.5mm headphone jack on the right.

As before, this MacBook Air 15in comes with Bluetooth 5.3, although its onboard Wi-Fi has been upgraded from Wi-Fi 6 to Wi-Fi 6E, giving it two times faster wireless data transfer speeds when used with a suitable router. The new model also has identical battery life to its predecessor too: 18 hours when streaming video or 15 hours when wireless web surfing – figures that were borne out by our testing.

Performance

While the differences between Apple's consumer and pro notebooks have narrowed (chiefly thanks to outward design changes and Apple silicon), the MacBook Air remains very much an everyday machine 'for the rest of us'. While it lacks the powerhouse chips, uprated memory and larger storage options of Apple's 'pro' notebooks, it's no slouch – even if its fanless design means it can't sustain heavy workloads over long periods.

In use, the 2024 MacBook Air starts up fast and gets to work quickly with apps typically launching within a bounce of two of their icons



You get one MagSafe 3 and two Thunderbolt/USB 4 ports, and there's a headphone jack on the other side.



The 15.3-inch LED-backlit display (with IPS) offers up to a 2880x1864 screen resolution at 224 pixels per inch.



Like the MacBook Air 13-inch model, we particularly like the Magic Keyboard and its handy Touch ID power button.

in the Dock. Unlike the 2023 base model MacBook Air, even the solid-state storage on this year's model feels suitably zippy, while our benchmarks (see table) reveal just how capable this year's model is. In Geekbench 6, the M3 MacBook Air 15in achieved an average score of 3,069 points in the single-core test and 11,922 in multi-core. And in Davinci Resolve 18 it rendered our effects-laden video in an average of 20 mins, 50 secs.

As with previous MBA models, the lack of fans can lead to slowdowns as the chip throttles to stop itself from getting too warm, with the slowest run-through taking 21 mins, 35 secs compared to the fastest at 20 mins, 09 secs -

the MacBook Pro with its built-in fans is much more consistent. In our one-hour Handbrake transcoding test, the MacBook Air averaged 23 mins, 41 secs, while in Shadow of the Tomb Raider, the game averaged 34 frames per second (fps) with the display resolution set to 1920x1200 and graphics set to High.

The M3 Max MacBook Pro 15in we tested in **#MF399** beat all those scores by some margin, but that's not surprising. What is surprising is how much more capable the M3 MacBook Air is compared to its M1 and M2 predecessors. For example, it took last year's M2 MacBook Air 29 mins, 35 secs to achieve our Handbrake result and 24 mins, 53 secs in Davinci Resolve. There are also differences between the performance of the 15in MacBook Air and its 13in cousin. While the 13-inch is a great little machine in its own right, its bigger sibling's thermodynamics mean it will generally perform better.

Whichever size MacBook Air you go for, all the usual superlatives apply. You'll be buying a premium laptop with excellent build quality, fast everyday performance and incredibly long battery life. No wonder the MacBook Air is the world's most popular laptop - it continues to go from strength to strength, and in its 15-inch guise even more so. **Rob Mead-Green**



Mac FORMAT VERDICT

> If you love the 16-inch MacBook Pro's size, but not its price, this is the notebook for you.



- ➕ Slim and lightweight
- ➕ Premium design
- ➕ M3 performance
- ➖ MacBook Pro is even better

Soundcore Boom 2

Get the party started with a sound and light show!

> £119.99 > FROM uk.soundcore.com > FEATURES 2.1-channel speaker system (2x 15W tweeters, 1x 50W racetrack subwoofer), 50Hz-20kHz frequency response, Bluetooth 5.3, integrated microphone, 1x USB-C (input), 1x USB-A (output), waterproof to IPX7, up to 24 hours' play time between recharges; 29.6x10.1x18.5cm, 1.66kg

Break out the barbecue and the tunes - garden party season's here and, boy, do we have the perfect speaker for you!

The Boom 2 is Soundcore's follow-up to the original 2021 Motion Boom. Only now it's even more fun to listen to and to use, thanks to improved audio, and a crowd-pleasing lightshow.

Available in black, dark blue or dark grey, the Boom 2 is a portable Bluetooth speaker that packs in an incredible amount of power despite its compact size. That's thanks to its 50W racetrack subwoofer and twin 15W tweeters, which not only enable the speaker to go fearsomely loud, but also give it a frequency response of 50Hz-20kHz. While that low end is not deep enough for truly thunderous bass (the speaker would need to be able to reach down to 20Hz or lower for that), it'll still give garden discos plenty of oomph, especially when used with its Bass Up control, which can be accessed using either the dedicated button on the speaker's top or via the free Soundcore app.

Talking of discos, what about that light show? That comes courtesy of the LEDs built into the pulsing passive bass radiators that sit at each end of the main speaker body. There



Not content with just blasting out your tunes, the Boom 2 also provides you with a light show.

are seven light patterns to choose from - Flash, Flame, Energy, Wave, Lightning, Fireworks and Rainbow - each with customisable colours and brightness.

Party poopers can choose to switch the lights off if they wish.

Getting the party started couldn't be easier as the Boom 2 connects quickly via Bluetooth and never dropped once during playback while testing. The disco can last all night too as the integrated battery promises up to 24 hours of continuous playback, although it will be shorter if you're using Bass Up mode and those flashing lights. The Boom 2 also has a couple of other aces up its sleeve; it's waterproof to IPX7 (although it's not dustproof - shame!), ensuring it can cope during the inevitable British summer downpour. Plus, the speaker will float if you accidentally drop it in the pool. The other ace is PartyCast. This lets you connect the Boom 2 to up to 100 other compatible speakers. Now that would be a party to remember.

Tweak to taste

In use, the Boom 2 does a fantastic job, delivering room-filling beats with ease. The speaker sounds best with Bass Up switched on and Soundcore Signature selected in the Soundcore app's EQ. You can also tweak the sound to suit your taste or create a Custom EQ of your own. With your party in full swing, the Boom 2 makes light work of bass-heavy tracks like Dua Lipa's *Houdini*, while giving Nick Cave's sonorous vocal on *La Vie En Rose* room to breathe during that slow smooch you planned for the disco's end. While kitchen-bound audiophiles will tut over the Boom 2's dynamics, the rest of us can party 'til the sun comes up. **Rob Mead-Green**



Despite its size, the Boom 2 boasts a 50W subwoofer and twin 15W tweeters, so you can really up the volume.

Mac
FORMAT

VERDICT

> A summer-ready ghetto blaster for any outdoor party.



- ⊕ Perfect for parties and BBQs
- ⊕ Long battery life
- ⊕ Customisable sound
- ⊖ Not dustproof



With an IPX7 rating, the Boom 2 is a great option for a pool party (or just the usual UK summer).



GameSir X2s Type-C

Up your game with this retro controller for iPhone 15 and iPhone 15 Pro

> £50 > FROM gamesir.hk > **FEATURES** Anti-drift Hall Effect sticks, Hall Effect analogue triggers, mechanical Microswitch buttons, 1x movable USB-C port, 1x USB-C port for pass-through charging, Turbo function; 110-168mm, 171.6g

The GameSir X2s comes with all the buttons, sticks and triggers you'd expect to find

Mac FORMAT VERDICT

> A great quality controller for iPhone 15 gamers.



- ⊕ Solid, chunky design
- ⊕ Movable USB-C port
- ⊕ Pass-through charging
- ⊖ Doesn't work with all games

Whether you're a big kid – or a little one – gaming on iPhone is incredibly popular. And it's getting even more so with the availability of AAA titles like *Resident Evil Village*, *Real Racing 3* and *Minecraft*. But, while using touchscreen-based controls is often perfectly fine, there are times when you really want to, ahem, up your game – and that's where devices like the GameSir X2s Type-C come in.

Inspired by the design of the Nintendo 2DS, the GameSir X2s Type-C is a spring-loaded gamepad that expands to accommodate your iPhone 15 or iPhone 15 Pro and includes a movable USB-C port that slots into the base of your phone. Powered by your iPhone, the GameSir X2s comes with all the buttons, sticks and triggers you'd expect to find on a gamepad like this – with one Hall Effect stick on the left and a second on the right; four shoulder buttons, plus a '+' shaped D-pad, and A, B, X and Y buttons. The whole thing feels chunky and high quality, with a rubberised surface that should ensure you don't lose your grip during frenetic gaming sessions. All the buttons and sticks fall easily under your fingers too.

While GameSir suggests downloading its free app from the App Store, we found we couldn't use it – chiefly because the X2s neither works using Bluetooth nor is supported by the app. The latter, though, may change.

The other thing to note is that not all games support gamepads like this one – while *Resident Evil Village*, *Call Of Duty Warzone Mobile* and *Asphalt 9* instantly recognise it, others such as *Mario Kart* and *Sonic The Hedgehog* don't – but that's chiefly because they've been programmed for touchscreen-only input. The X2s will also work with any Steam games you've installed on your Mac when connected to your iPhone wirelessly using Steam Link, giving you another way to play. However, while the X2s includes a second USB-C port that you could, theoretically, use to connect the gamepad to a Mac or iPad, it won't work as controller for those other devices, and that's a shame; the second USB-C port is for passthrough charging for iPhone only.

Making connections

In use, the GameSir X2s works brilliantly – and it's great that it has a physical connection to your iPhone rather than relying on Bluetooth. Its precision controls help you easily wipe out rival players in *Call Of Duty Mobile Warzone* or while haring around a racetrack in *Real Racing 3* without obscuring the display with your fingers. We also love the fact that its movable USB-C port is flexible enough to make connecting your iPhone painless – and doesn't rely on you removing your iPhone from a protective case to do so. **Rob Mead-Green**

Anker MagGo Wireless Charging Station

Stick this in your bag if you're off out...

> **£99.99** > **FROM** anker.com > **FEATURES** MagSafe/Qi2 certified, 15W ultra-fast charging, 40W USB-C charger, 1.5m USB-C to USB-C cable; 89x60x25mm (folded), 195.6g



Mac FORMAT VERDICT

> A compact 3-in-1 charger for life on the lam.



⊕ MagSafe and Qi2 compatible

⊖ No wired charging option

Whether you're going away from a night, or an extended

break, charging your iPhone, Apple Watch and AirPods can be a concern.

While you could pack individual chargers for each, a compact travel charger makes sense, and there are plenty to choose from, including Mophie's folding 3-in-1 Travel Charger with MagSafe (£144.95, uk.zagg.com), STM's ChargeTree Go (£69.99, stmgoods.com) and

this, the MagGo Wireless Charging Station from Anker.

Around the size of a deck of cards, it has a MagSafe/Qi2 charger on top, which opens to reveal a wireless charging pad for AirPods, while the base has a fold-out Apple Watch charger. Very neat. Included in the box is a UK-spec 40W USB-C charger, plus a 1.5m USB-C to USB-C cable to power it all. And it promises to boost your devices relatively quickly too, with 15W going to your

Anker's multi-device charger boasts a neat reverse origami-style design!

iPhone, 5W to your Apple Watch and another 5W to your AirPods. The MagSafe section also doubles as an angled stand, so you can use your iPhone in StandBy mode. In use, the only thing obviously missing is a second charging port for peppering up non-wireless devices.

Rob Mead-Green

JLab Epic Lab Edition

Premium wireless earbuds with a great sound

> **£199.99** > **FROM** uk.jlab.com > **FEATURES** Hybrid Dual Drivers, Smart ANC, Bluetooth 5.3 (Multipoint), spatial audio support, wireless charging, USB-C port (in case), up to 56 hours' play time, 3 pairs' foam ear tips, 3 pairs' silicone gel ear tips, IP55 (earbuds only)



JLab ramps up the sound quality with the Epic Lab Edition earbuds.

Mac FORMAT VERDICT

> The Epic Lab Edition are JLab's best-sounding earbuds yet.



⊕ Premium sound and design

⊖ Earbuds are a little bulky

Famed for making affordable wireless earbuds, JLab's

now stepping things up a gear with its most expensive in-ears to date: the Epic Lab Edition.

Costing £199.99, they're clearly aimed at Sony's WF-1000XM5 and Bose's QuietComfort Ultra with a premium design and audio performance to match.

The earbuds feature a hybrid dual driver with spatial audio support and Active Noise Cancelling (ANC), along with Bluetooth 5.3 with Multipoint, enabling you to

easily switch between devices while using them. You also get a USB-C dongle to connect the earbuds wirelessly to your

Mac. The earbuds last for up to 13 hours with ANC off and nine hours with it on. The metal-clad case enables you to charge the earbuds another three times, and the case itself can be charged wirelessly or by using the USB-C port on its rear.

The earbuds are water- and dust-resistant to IP55, although the case isn't.

With three pairs of foam and three pairs of silicone ear tips included, finding the perfect fit is easy and while the earbuds are bulky, they're comfortable. Sound quality is great, serving up lashings of bass on Dua Lipa's *Houdini*, while remaining balanced and controlled. You can tailor the sound to suit using the free JLab app. **Rob Mead-Green**

The best Mac keyboards

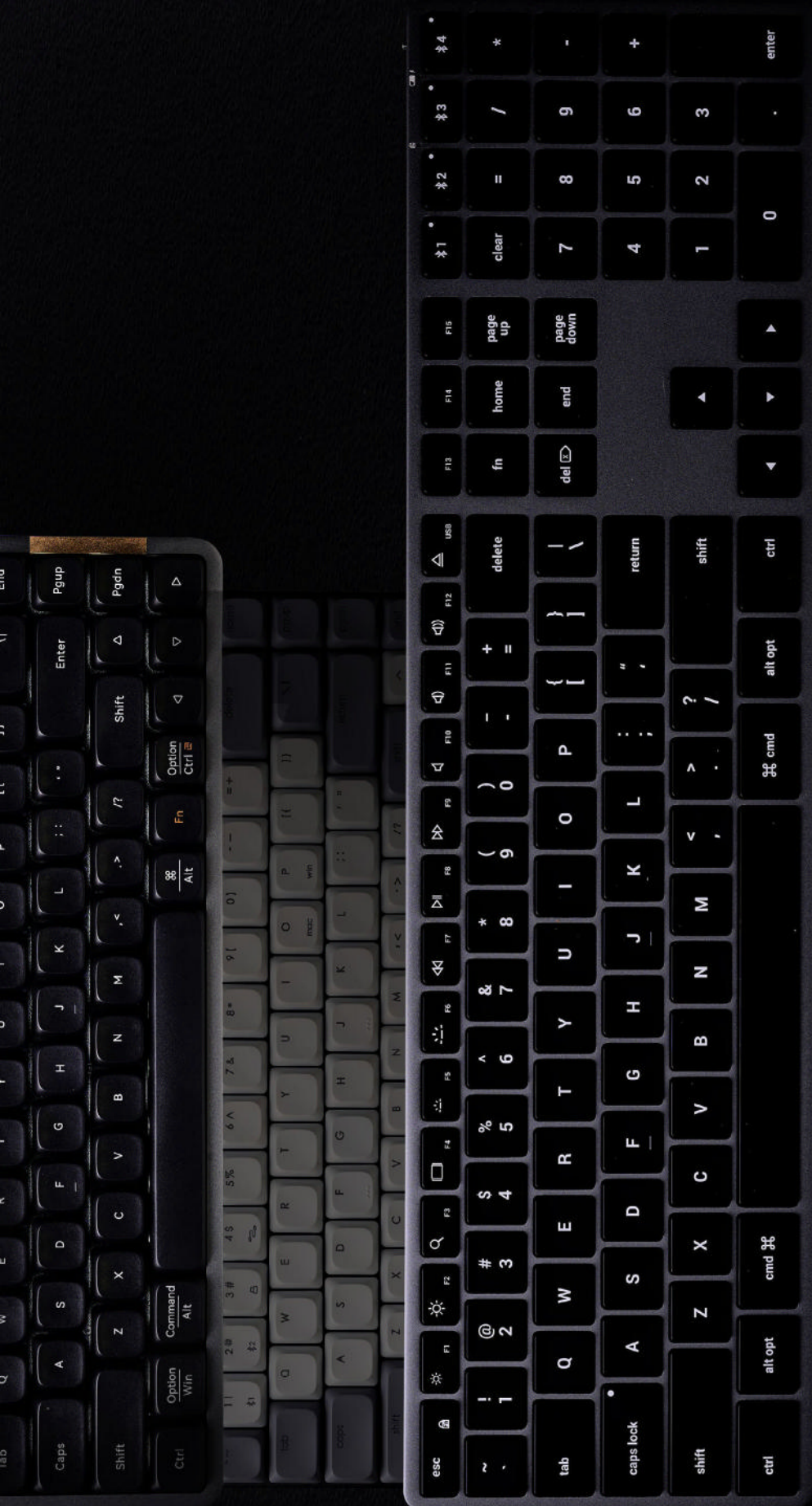
That feeling when everything just clicks

Group test

Reviewed by
ALEX BLAKE

ON TEST...

- › Keychron K2
- › Lofree Flow
- › Logitech MX Keys S
- › Logitech MX Mechanical Mini
- › Satechi Slim X3
- › Satechi SM1 Slim



Apple's Magic Keyboard is popular with Mac users, but it's not for

everyone. Its key presses can feel shallow, the standalone version doesn't have backlighting, and the less said about its squished arrow keys, the better.

Fortunately, there are plenty of alternatives. Whether you're looking for a Magic Keyboard replacement or something to complement your MacBook or iPad, a keyboard that will work with multiple devices or one with tactile mechanical switches, you'll be able to find something for your needs. With our group test to hand, your task will be made considerably easier.

We've put together six of the best Mac keyboards available right now, from sleek, slimline options that use the Magic Keyboard for inspiration to compact mechanical keyboards that offer a supreme typing feel. The result should give you a clearer idea of which is worth your time if you feel like switching.

We've tested each keyboard against a range of criteria (see below) to see which one is worth your money. Read on to find out what we thought.

How we tested

➤ We paired each keyboard with a Mac and spent time typing articles and doing day-to-day tasks on each one. We assessed the typing feel and key layout, how easy it was to pair each keyboard and switch devices and operating systems (where available), and looked for extra features like backlighting and hot-swappable switches. Overall typing comfort was most important, but each device's complete feature set was considered when coming to a conclusion.

Things to consider...

1 Should you go mechanical?

Some keyboards use tactile mechanical switches under their keys for improved typing feel, but they can be loud and expensive.

2 Device connections

Having multiple Bluetooth connections means a keyboard can flip between different devices. Some keyboards can also switch their layout between macOS and Windows functionality.

3 Number pad or no?

Some keyboards include a number pad while others compress their layouts into more compact forms.

4 Keycap concerns

Keycap material matters. 'Dye sublimation' and 'double shot' legends last longer than printed letters, while keys made from ABS plastic go shiny quicker than PBT ones.



Keychron K2

> FROM £84 > FROM keychron.uk

1 Keychron's K2 is tremendous value for money, with an affordable price tag and plenty of useful features.

It's a mechanical keyboard with a trick up its sleeve; you can change its switches for others that feel different (bought separately), altering your typing experience. We found its typing feel with blue 'clicky' switches to be fast and comfortable, if a little heavy.

Like several keyboards here, the K2 can flip between multiple devices and macOS and Windows layouts. However, it has a physical switch on the side that switches OS layouts, which

is much quicker and easier than rival keyboards. It's a neat feature.

We did find its compact layout a little too cramped, and it was hard to find certain keys without looking. Its keys are also louder than some of the keyboards tested thanks to their clicky switches. If you work alone that won't be a problem, but you might get some annoyed glances if you frequent an office.

VERDICT

- ⊕ Hot-swappable switches
 - ⊕ Mac and PC layouts
 - ⊖ Some keys hard to find
 - ⊖ Fairly loud
- ★★★★★

Lofree Flow

> \$159 (about £155) > FROM lofree.co

2 The Lofree Flow is the pinnacle of keyboard build quality.

Its all-metal chassis is weighty and rock solid, its PBT keycaps look and feel beautiful, and it's full of delightful little touches, from its copper-coloured highlights to its adjustable underside lighting.

Its keys are surprisingly quiet for a mechanical board and are supremely comfortable in use, with just the right amount of resistance on each press. They also sound great and are reassuringly stable.

Disappointingly, you can't change the board's angle, and it's a little flat for our liking.

Its layout is also very compact, although we didn't struggle to find certain keys as much as on rival keyboards thanks to its chunky, well-defined keycaps. It also only comes in a US configuration, but that's something you can get used to. We didn't feel any of those issues were killers, and overall it's a fantastic option if you want a mechanical keyboard, if a little on the pricey side.

VERDICT

- ⊕ Amazing build quality
 - ⊕ Excellent typing feel
 - ⊕ Hot-swappable switches
 - ⊖ Can't adjust typing angle
- ★★★★★



2



3

Logitech MX Keys S

> £109.99 > FROM [logitech.com](#)

3 Logitech's MX Keys S gives one of the most Apple-like typing experiences of any keyboard we tested. It's a great choice if you like typing on the Magic Keyboard but want a few extra features.

You'll love how beautifully quiet its typing is – the difference between it and a loud mechanical keyboard is night and day. Its keys are soft to press yet stable and never squishy, so you can dash over them at a rate of knots without losing accuracy. Each key is dished too, which helps you locate them by touch. While it's not *quite* as satisfying to type

on as a mechanical keyboard, it's not far off.

The MX Keys S is a large keyboard, and it comes with the full number pad to the right of the arrow keys. That can make it feel overly wide at times. You can't change the board's height, but we found it to be set to a pleasant angle. It's also solidly built, with a plastic and aluminium body that looks and feels extremely classy.

VERDICT

- ⊕ Very quiet
 - ⊕ Great typing feel
 - ⊕ Excellent build quality
 - ⊖ Quite large
- ★★★★★



4

Logitech MX Mechanical Mini

> £149.99 > FROM [logitech.com](#)

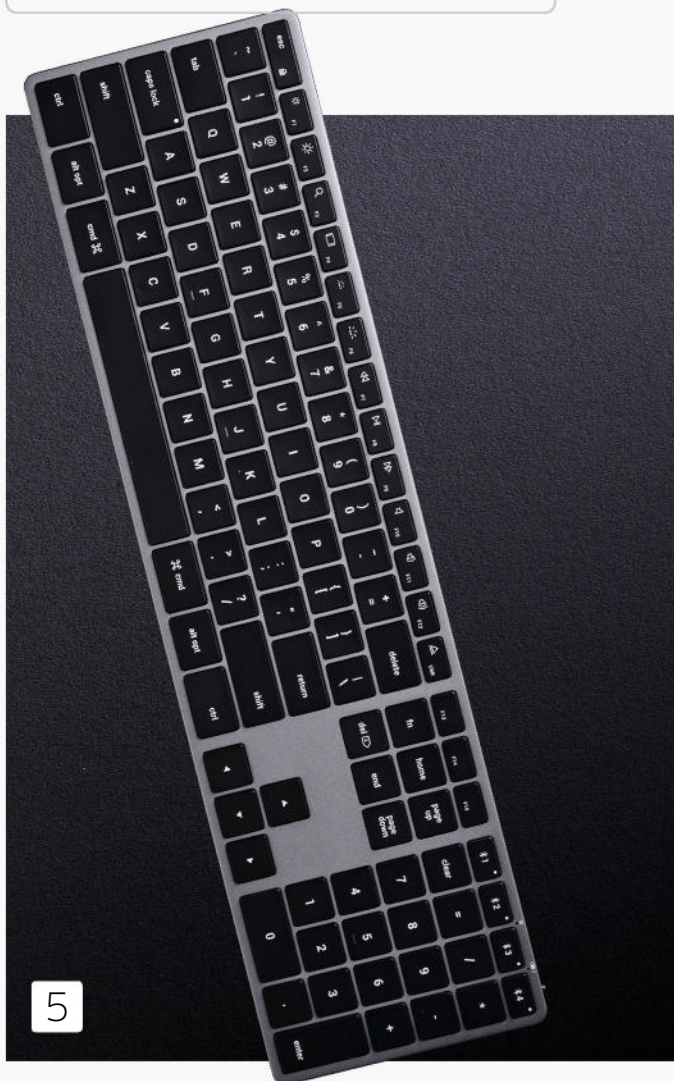
4 Logitech's MX Mechanical Mini keyboard is a strong effort. It's enjoyable to type on, with keys that are springy enough to give plenty of physical feedback without you 'bottoming out' and thudding your fingers on the backplate.

Typing is comfortable and fast, even for long periods, something that's helped by the chunky keycaps. It's also quiet for a mechanical keyboard, and we liked the smart backlighting that dims when you move your hands away (there are multiple backlighting options, too).

As with other keyboards that use the same truncated layout, certain buttons like the arrow keys can be hard to locate. We also noticed that the keycaps can very easily get smudged and greasy, much more so than the other options in this test. And despite all it has going for it, it's the most expensive product in this test.

VERDICT

- ⊕ Fast, quiet, comfy typing
 - ⊕ Angled keycaps
 - ⊖ Keycaps attract marks
 - ⊖ Expensive
- ★★★★★



5

Satechi Slim X3

> \$89.99 (about £85) > FROM satechi.net

5 Typing on the Satechi Slim X3 was the closest we came to the Magic Keyboard in terms of feel. As a non-mechanical keyboard, there's a relatively low amount of travel on each key press, so it'll feel (and sound) familiar if you like Apple's version. We appreciated the all-metal chassis, and you can also connect to four devices over Bluetooth, the most of any keyboard tested here.

Unfortunately, the Slim X3 felt like it was lacking a little quality. The keys were a touch unstable and wobbly, which led to some typing errors. The keyboard's angle is also very

low and can't be changed much - it comes with some stick-on feet, but they're non-adjustable and don't feel like a high-quality solution.

There were a few other issues. Unlike some boards, it doesn't let you switch between macOS and Windows arrangements, while it only comes in a US layout with a slim Return key. You can get used to that, but it's worth noting nonetheless.

VERDICT

- ✦ Connects to four devices
 - ✦ Quiet typing
 - ✗ Unstable keys
 - ✗ Non-adjustable height
- ★★★★★



6

Satechi SM1 Slim

> \$99.99 (about £95) > FROM satechi.net

6 The Satechi SM1 Slim keyboard is one of the best-looking products in this test. Its white and grey theme fits right in with your Apple devices while retaining its own distinct identity, and its bright, clear backlighting turns off when you move your hands away.

It uses tactile mechanical switches for rapid, accurate typing, and its slightly dished keys really help with this. Unlike the Logitech MX Mechanical Mini, though, we experienced some 'bottoming out' of the keys, which means we frequently pressed the key all the way down until it struck the

underlying backplate. This made our fingers sore over time and could be prevented by adding a little more resistance to each key switch.

We aren't huge fans of its very compact shape, which made it a tough to find the arrow keys among surrounding buttons. The Satechi SM1 Slim also only comes in a US layout, so there's also a degree of adaptation required.

VERDICT

- ✦ Looks gorgeous
 - ✦ Solid construction
 - ✗ Some 'bottoming out'
 - ✗ US layout only
- ★★★★★

THE WINNER

Lofree Flow

A gorgeous keyboard fit for any Mac user

Mac
FORMAT
BEST ON
TEST

Picking a winner was tough, but there were a few keyboards we could rule out. The Satechi Slim X3 had a few too many lapses to come out on top. The Logitech MX Mechanical Mini and the Satechi SM1 Slim are decent, but neither did enough to

beat out their rivals. Keychron's K2 is a serious contender, and its layout toggle and hot-swappable switches are excellent features that make it customisable and practical. But in the end its typing feel was too heavy and its layout too condensed.

Choosing between the Lofree Flow and the Logitech MX Keys S was almost impossible. Logitech's superb keyboard is quiet, comfortable, and reliable in almost every way, and if you don't want a mechanical keyboard, it's absolutely worth your money. But it was

pipped to the post by the Lofree Flow. We love this device - its craftsmanship is unparalleled, its key comfort supreme, its features beautifully considered - and it's a brilliant choice for any Mac user. Either device could have won, and both will make you very happy.

> How do they compare?



> Specs	Keychron K2	Lofree Flow	Logitech MX Keys S	Logitech MX Mechanical	Satechi Slim X3	Satechi SM1 Slim
Price	From £94	\$159 (about £155)	£109.99	£149.99	\$89.99 (about £85)	\$99.99 (about £95)
Website	keychron.uk	lofree.co	logitech.com	logitech.com	satechi.net	satechi.net
Mechanical switches?	Yes	Yes	No	Yes	No	Yes
Mac and PC layouts	Yes	Yes	Yes	Yes	No	Yes
UK layout	Yes	No	Yes	Yes	No	No
Number pad	No	No	Yes	No	Yes	No
Multiple devices	Yes, up to three	Yes, up to three	Yes, up to three	Yes, up to three	Yes, up to four	Yes, up to two
Connectivity	Bluetooth, wired (USB-A)	Bluetooth, wired (USB-C)	Bluetooth, Logi Bolt dongle (USB-A)	Bluetooth, Logi Bolt dongle (USB-A)	Bluetooth, wired (USB-C)	Bluetooth, dongle (USB-A), wired (USB-C)
Battery life (backlight off)	Up to 240 hours	Up to 200 hours	Up to 610 hours	Up to 1,220 hours	Up to 131 hours	Up to 500 hours
Battery capacity	4,000mAh	2,000mAh	1,500mAh	1,500mAh	1,300mAh	2,500mAh
Keycap material	ABS	PBT	ABS	ABS	ABS	Polycarbonate
Extras	Hot-swappable switches	Hot-swappable switches	Logitech Flow (multiple control)	Logitech Flow (multiple control)	Connects to four devices	All-metal chassis
> Overall	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★

Note: All the keyboards have a backlight feature. ABS = acrylonitrile butadiene styrene; PBT = polybutylene terephthalate.

Note: The final verdict scores reflect the overall opinion of a product and are not necessarily an average of the criteria listed in the table.

ACDSee Photo Studio 10

Organise, edit and share your shots

> \$129.94 (about £120) > FROM acdsee.com > NEEDS macOS 12 or later

An even faster way to manage your shots is provided by the new AI-assisted People workspace

With our ever-present iPhone, our collection of photos grows day by day. We may also have photos scattered in folders on our Mac, or even on external drives. ACDSee Photo Studio 10 is a Digital Asset Management (DAM) app that is designed to help you organise your quickly growing collection of images so that you can find, edit and share your favourite shots more easily. If you want to use ACDSee to organise and edit photos that are stored in your iPhone's Photos Library then you can download the free Mobile Sync app to your iPhone. You can then use the app to select specific images on your iPhone and transfer them to the ACDSee catalogue on your Mac.

ACDSee Photo Studio 10's interface is divided into workspaces so you can focus on various tasks. The Manage workspace provides typical asset-management tools such as the ability to assign star ratings and colour labels. You can then use filters to find images that

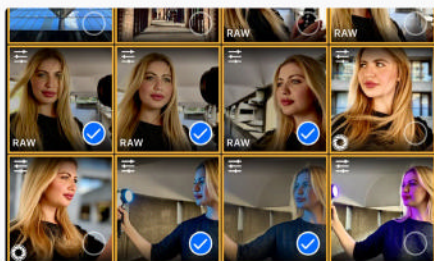


The Develop workspace adjusts colours and tones by applying Look Up Tables (LUTs).

match a wide combination of criteria (such as five-star images with a green label that have the keyword 'woman'). Assigning keywords can be a time-consuming task so ACDSee Photo Studio 10 provides pre-populated keyword sets, such as Landscapes or Portraits. Click on a particular keyword in a set (such as Fashion or Lifestyle) and it will be instantly assigned to a selected photo (or group of shots).

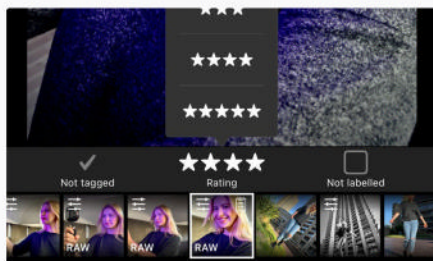
APP TIPS

How to transfer photos from iPhone to ACDSee



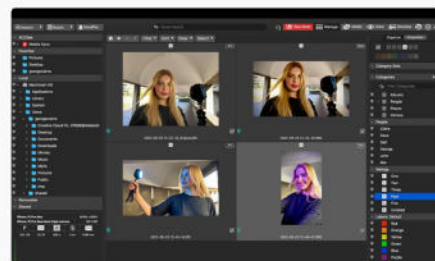
Mobile sync

Download the free Mobile Sync app onto your iPhone. The app can access your iPhone's Photos library. This enables you to browse through thumbnails of your images in Albums that you've created using the Photos app.



Rate and select

You can tap to select thumbnails to transfer to your Mac's copy of ACDSee. Tap on a thumbnail for a bigger picture. Here you can rate the shots with stars. If you tap Metadata, you can view the image's shooting location on a map.



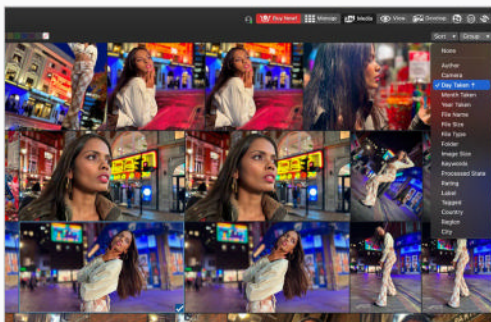
Transfer to Mac

After rating and selecting your shots in Mobile Sync, tap Share. The files will be sent wirelessly to your Mac. You can then view them in the Mobile Sync section of the Manage workspace and filter them by star rating.



An even faster way to manage your shots is provided by the new AI-assisted People workspace, which automatically finds faces for you to identify. Once you've put a name to a face, the People tool will group other shots containing that person together, making it easier to find particular people pictures.

The other new workspace in ACDSee Photo Studio 10 is Media. This displays all the shots that you've added to the app's database as a series of scaleable and sortable thumbnails. You can organise the way assets are displayed - such as grouping them by Type (clips or stills) or sort them by attributes such as Date Taken or by Rating. This gives you the freedom to



The new Media workspace displays thumbnails using a wide choice of sorting criteria.

work in a way that suits your specific asset-management needs. You can also edit metadata in the Media workspace (such as assigning keywords to a shot).

Once you've used ACDSee Photo Studio 10 asset-management tools to organise your images, you'll want to share your favourites, but they may need a little editing first. The Develop workspace provides a comprehensive collection of digital darkroom tools that enable you to correct problems with colour, tone and composition so that your images look their best. You can also creatively adjust them using Split Toning techniques or apply LUTs (Look Up Tables) to create a wide range of looks that should elicit more likes on your Instagram feed. You can even use brush tools to target specific areas in a shot and then adjust their properties - such as darkening (burning) detail into parts of an overexposed sky or lightening (dodging) detail in an underexposed face.

This option to make selective brush-based adjustments gives ACDSee Photo Studio 10's editing tools the edge over the editing tools in Apple's Photos app, though on the downside you can't edit an iPhone's Portrait Mode blur amount in ACDSee Photo Studio 10.

George Cairns

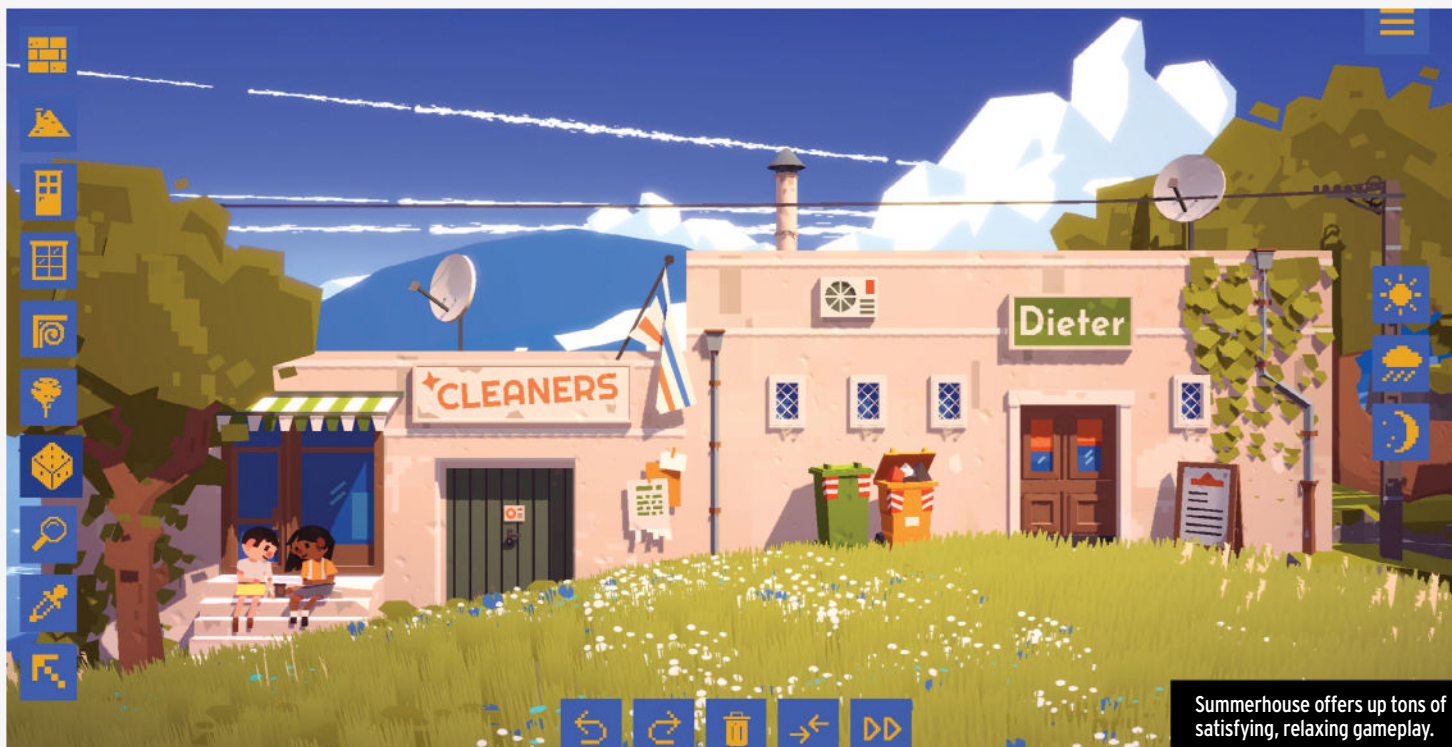
The Develop workspace's Color Wheel enables you to change the hue of targeted colours.

Mac FORMAT VERDICT

> ACDSee Photo Studio 10's asset-management tools enable you to easily find, edit and share your shots.



- ⊕ Transfer photos from iPhone via app
- ⊕ AI-assisted people recognition
- ⊕ Faster keyboarding with sets
- ⊖ Doesn't support Portrait mode edits



Summerhouse

Calming construction without the stress of a real build

> £3.99 > FROM futurefriendsgames.com > NEEDS macOS 13 or later

You can craft beautiful manors, imposing castles or run-down strip malls

Mac
FORMAT

VERDICT

> A dreamy, relaxing building game with all the freedom you could want.

★★★★★

⊕ Very relaxing

⊕ Looks beautiful

⊕ Detailed item library

⊖ Can't move placed pieces

Do intense, stressful games put you off? If so, we have some good news: Summerhouse is the antithesis of that kind of gaming experience. This relaxing home-building title is the epitome of 'chill'.

There are no goals, no win conditions and no ways to lose. You just load it up, start building and see where your creativity takes you.

The idea is to construct one or more buildings using various pieces. You place the pieces where you want, slowly exploring different ideas and seeing what works and what doesn't. You can craft beautiful manors, imposing castles or run-down strip malls - or a blend of everything - the choice is yours.

That's possible thanks to the large variety of pieces Summerhouse provides, from walls and roofs to doors and plants, and each one feels weighty and real when you place it. We also love the many accoutrements and extras that add a real lived-in feel, such as telephone boxes, graffiti, bunting, plastic chairs and more.

Summerhouse is such a relaxing game that it's easy to tune out and clear your mind of all distractions. Your builds might not be perfect, but that's fine - the game doesn't punish you with time limits or incorrect placement warnings. It does reward you, however, by adding pieces to your library. These can be unlocked when you place certain blocks together - a plant next to a particular door,

for example. There are no hints telling you how to unlock these extras, which encourages you to try new designs and combinations.

Cosy homes

Graphically, Summerhouse is gorgeous, whether you pick its pixel art or cartoon style. You start with four building environments, each of which exudes a lovely summery charm. If you prefer, you can change the weather to rain or the time to night, at which point your building's lights come on and beautifully shine through the windows. Accompanying the game is a gentle soundtrack that calms and soothes (ideal for those times when you can't quite get the look you want).

There aren't many frustrations with Summerhouse, but one notable one is that you can't move or adjust pieces once they've been placed. It means you must delete an erroneous element and replace it with something else if you change your mind. It would also be good to be able to rotate the camera to check piece positioning - right now, you can only move it in two dimensions.

But that's it for the negatives. Okay, so if you're a high-adrenaline achievement hunter, Summerhouse probably isn't for you. But if all you want to do is empty your brain and build an array of detailed, lived-in buildings, this game will be like catnip. **Alex Blake**



Almost every scene in Stray is a feast for the eyes.

Stray

It's the cat's pyjamas

> £24.99 > FROM stray.game > NEEDS macOS 12 or later, Mac with Apple M1 chip or later

You spend your time exploring environments that are almost unparalleled in their beauty

Mac
FORMAT

VERDICT

> Stunning to look at and packed with absorbing gameplay, Stray is one to savour.

★★★★★

- ⊕ Looks stunning
- ⊕ Atmospheric audio
- ⊕ Intriguing story
- ⊖ Controls need changing

Most games focus on human problems and human solutions.

Not so Stray, which follows a ginger cat as it explores a dystopian robot world that's suspended between life and death. Separated from your feline companions, you must help an android underclass escape their slum city and find a way to the surface world. From helping a flying bot recover its memories to reuniting a band of explorers who sought a way out of their subterranean incarceration, Stray's story is compelling at every turn.

Its main conceit – the feline protagonist – isn't just a gimmick. It opens up new ways to play; jumping onto rooftops and squeezing through gaps replace shooting and driving, requiring you to crack its puzzles from a fresh angle. It also allows for cat-based humour. Some challenges are solved by pushing objects off ledges, as cats love to do. When you get a new backpack, your cat slinks low to the ground in a fashion any cat owner will recognise. The animations, meanwhile, are beautifully lifelike.

When you're not seeing what happens when your cat gets a paper bag stuck on its head, you spend your time exploring environments that are almost unparalleled in their beauty. You'll see dark streets illuminated by Day-Glo neon, dingy dungeons littered with the crumbling remains of past inhabitants, and ominous tunnels overgrown with the fleshy abodes

of the Zurks (small creatures that consume anything they see). Wherever you are, you'll want to stop and wonder at your surroundings.

Herding cats

Stray's levels are varied, filled with simple puzzles, fetch quests, stealth missions and hell-for-leather escapes. Each is packed with secrets and collectibles, encouraging exploration and ensuring nothing is too linear. Most are enjoyable and rewarding.

The exceptions are any that involve encounters with Zurks. You can't fight them, you simply have to flee, but that can get tricky with a mouse and keyboard. Often, you must steer your cat, hold Shift to sprint, press the left mouse button to fire a weapon, and mash a key to shake Zurks off. It's too much at once. We recommend changing the 'shake' command to 'single tap' and sprinting to 'toggle' to make things more bearable. Or try using a controller.

Stray is also a heavy battery hog, almost draining our M1 Pro MacBook Pro entirely within 90 minutes. Performance was decent – we hit around 40fps on medium settings, but it felt much smoother.

Ultimately, Stray is an absolute treat on every count. From its story and environments to its gameplay and audio, it'll live long in the memory. For Mac gamers, it's close to purr-fection. **Alex Blake**

6 apps to... Improve your focus

Need a hand staying on task? These apps can help

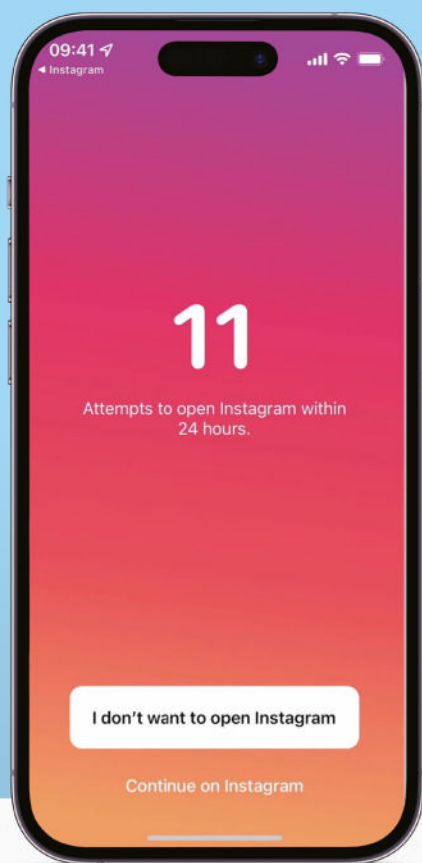


Forest: Focus for Productivity

> £3.99 > FROM forestapp.cc
> NEEDS iOS 13 or later



Forest is such a simple yet incredibly effective app. It starts with a simple premise: leave your phone alone and a forest grows on-screen. But if you close the app or indulge in a little social media... The forest dies. Its clever mechanism rewards you for staying away from your device and its distractions. Instead of putting up annoying roadblocks, it alters your mindset so that you *want* to ditch your iPhone and get on with your work.

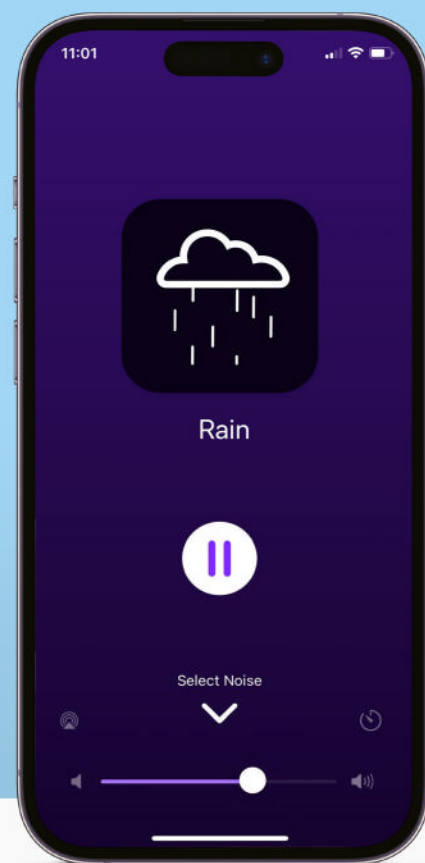


one sec | screen time + focus

> Free (IAPs) > FROM one-sec.app
> NEEDS iOS 14 or later



One sec takes a different approach to distraction blocking. It doesn't outright prevent you from using certain apps – it just makes things a little harder. It does this by adding a delay whenever you open a specified app, forcing you to consider whether you actually want to break your concentration. Like Forest, it's about encouraging you to change your mindset and make decisions for yourself, which could help break the cycle.



Dark Noise: Ambient Sounds

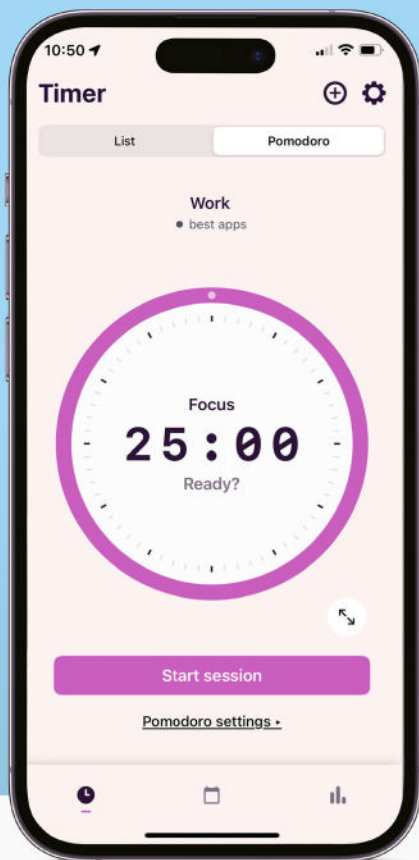
> Free (IAPs) > FROM darknoise.app
> NEEDS iOS 16 or later



Many people find that audio is the missing piece of their concentration puzzle. With the right sounds pumping into your ears, you can filter out distractions. Dark Noise creates long loops of ambient sounds that are perfect for building focus, including gentle rain, crackling fires, distant storms and more. As well as the app's own tracks, you can create custom mixes that suit whatever mood you're in, whether you want to work, fall asleep or anything else.

Our devices are with us everywhere we go these days, which makes it harder than ever to avoid the disruptions and temptations that come with them. With apps, games and social media all vying for your attention, blocking them out can be

tricky. But don't worry if it all feels a little overwhelming; there are plenty of apps that can help. The six apps here block distractions, focus your mind and help you plan your day, ensuring the important tasks get done and the diversions get banished out of sight. **Alex Blake**

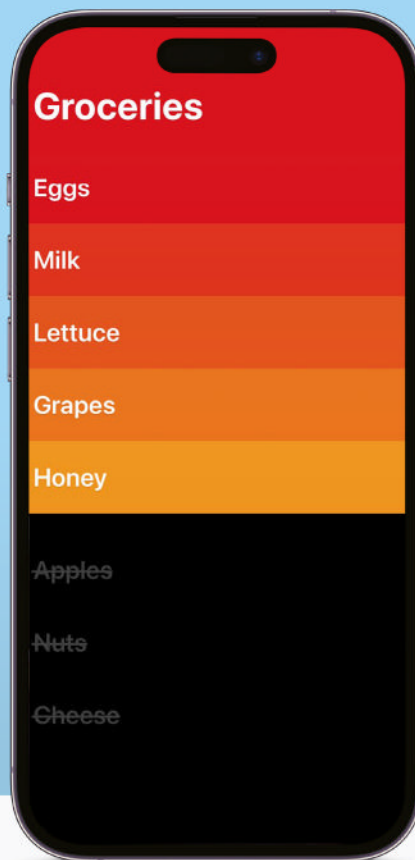


Toggl Track: Hours & Time Log

> **Free** > **FROM** toggl.com
> **NEEDS** iOS 15 or later



With the Pomodoro Technique, you set a timer for 25 minutes of work, have a five-minute break, then repeat. It's highly effective, and Toggl Track lets you put it to great use. But there's more to the app than that; you can set timers to record how long you spend on a piece of work - ideal for freelancers and anyone tracking project time. It syncs with calendars, can set reminders, and can even detect idle time and exclude it from your timers.

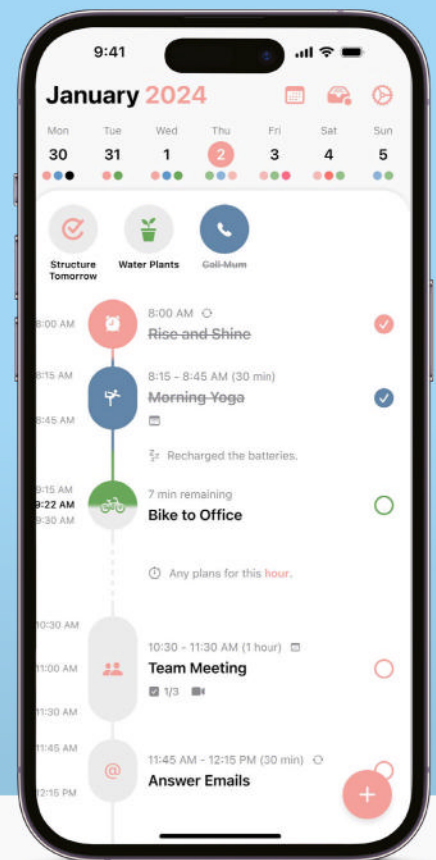


Clear Todos

> **Free** (IAPs) > **FROM** useclear.com
> **NEEDS** iOS 15 or later



You've never seen a to-do list app quite like Clear. It turns convention on its head, using strong colours, large fonts and bold designs to make tracking your tasks as simple as possible. It pairs that with some of the most ingenious gestures you'll ever use, which are both incredibly powerful and yet so easy to learn. Plus, it's totally free to use with no ads or subscriptions. It's the ideal way to keep on top of your work, stay focused and - dare we say it? - it even makes to-do lists feel fun.



Structured - Daily Planner

> **Free** (IAPs) > **FROM** structured.app
> **NEEDS** iOS 16 or later



Need an all-in-one app to help you stay on track? Structured packs in a calendar, to-do lists and a habit tracker, which combine to ensure your mind stays on the job at hand. With the ability to create tasks, set deadlines and organise thoughts - all without needing to switch between apps - it's adept at helping you maximise focus when you need to knuckle down. It even has a focus timer for when you want to start a session of deep concentration.

STORE GUIDE

Your guide to the best Apple hardware and third-party accessories

EXPECTED
OCT 2024
UPDATED
OCT 2023

iMac > From £1,399

> In October 2023, Apple updated its only iMac – the 24in model, so that it now benefits from Apple's also newly-released M3 chip. You can now choose between an 8-core CPU/8-core GPU at the entry-level, or an 8-core CPU/10-core GPU on the mid-range and top-tier versions. You still get a 4.5K (4480x2520) Retina display, and all models come with 8GB of memory as standard, but this is now upgradeable to 24GB throughout. The solid-state drive (SSD) storage ranges from 256GB on entry-level and mid-range versions to 512GB on the top tier, although you can add up to 1TB on the entry-level and up to 2TB on mid-range and top-tier models.

The entry level version is available in Blue, Green, Pink and Silver, but the mid- and top-tier models are also available in Yellow, Orange, and Purple. Each M3 iMac also comes with a 1080p FaceTime camera, and a six-speaker sound system with support for spatial audio. You'll also find two Thunderbolt/USB 4 ports on each model, with mid-range and top-tier options offering two additional USB 3 (USB-C) ports. Rather surprisingly – and pleasingly – the starting price remains unchanged at £1,399.



iMac 24in £1,399 (Entry level)

Display: 23.5in 4.5K Retina (4480x2520) with True Tone
Chip: Apple M3 with 8-core CPU (4 performance cores, 4 efficiency cores), 8-core GPU, 16-core Neural Engine
Memory: 8GB (upgradeable to 24GB)
Storage: 256GB (upgradeable to 512GB or 1TB)
Ports: 2x Thunderbolt/USB 4, 1x Gb Ethernet (option)

iMac 24in £1,599 (Mid-range)

Display: 23.5in 4.5K Retina (4480x2520) with True Tone
Chip: Apple M3 with 8-core CPU (4 performance cores, 4 efficiency cores), 10-core GPU, 16-core Neural Engine
Memory: 8GB (upgradeable to 24GB)
Storage: 256GB (upgradeable to 512GB, 1TB or 2TB)
Ports: 2x Thunderbolt/USB 4, 2x USB 3, 1x Gb Ethernet

iMac 24in £1,799 (Ultimate)

Display: 23.5in 4.5K Retina (4480x2520) with True Tone
Chip: Apple M3 with 8-core CPU (4 performance cores, 4 efficiency cores), 10-core GPU, 16-core Neural Engine
Memory: 8GB (upgradeable to 16GB)
Storage: 512GB (upgradeable to 1TB or 2TB)
Ports: 2x Thunderbolt/USB 4, 2x USB 3, 1x Gb Ethernet



Apple Magic Keyboard with Touch ID and Numeric Keypad

> From £179
> This extended keyboard is a great upgrade option for any Mac and comes with Touch ID for faster Mac logins. The black version costs £199.

Apple Magic Mouse

> From £79
> Design quirks aside, (we're looking at you, Lightning Port) the Magic Mouse is a great pointing device, thanks to its Multi Touch support. The black version costs £99.



Apple Magic Trackpad

> From £129
> This Multi Touch glass trackpad is a thing of beauty, giving you lots of control over macOS and it's rechargeable too. The black version costs £149.



**EXPECTED
OCT 2024
UPDATED
JAN 2023**



Mac mini ^{> From} £649

> **Apple's most affordable desktop may not come with a mouse, a trackpad or keyboard, but it's also great value starting at even less than the last model at £649.**

Despite the reduction in price, the Mac mini now boasts Apple's M2 chip, boasting an 8-core CPU, 10-core GPU and 16-core Neural Engine. The 8GB of memory can now be boosted up to 24GB, while SSD storage options range from 256GB all the way up to 2TB. There is now also an M2 Pro version with a 10-core CPU/16-core GPU (configurable to 12-core CPU/19-core GPU), with 16 to 32GB memory and 512GB to 8TB SSD storage.

Entry-level and mid-range M2 Mac mini models continue to come with two Thunderbolt/USB 4 ports, but the M2 Pro model has now has four.

Mac mini £649 (Entry level)

Chip: Apple M2, 8-core CPU (4 performance cores, 4 efficiency cores), 10-core GPU, 16-core Neural Engine
Memory: 8GB (upgradeable to 24GB)
Storage: 256GB (upgradeable to 512GB, 1TB or 2TB)
Ports: 2x Thunderbolt/USB 4, 2x USB-A, 1x HDMI 2.0, 3.5mm headphone jack, Gb Ethernet (10Gb Ethernet option)

Mac mini £1,399 (Ultimate)

Chip: Apple M2 Pro with 10-core CPU (4 performance cores, 4 efficiency cores), 16-core GPU, 16-core Neural Engine
Memory: 8GB (upgradeable to 16GB)
Storage: 512GB (upgradeable to 1TB or 2TB)
Ports: 4x Thunderbolt/USB 4, 2x USB-A, 1x HDMI 2.0, 3.5mm headphone jack, Gb Ethernet (10Gb Ethernet option)



**EXPECTED
MAR 2025
UPDATED
MAR 2024**

MacBook Air ^{> From} £1,099

> **Apple's most affordable laptop was given an upgrade in March 2024, with both the 13-inch and 15-inch models now sporting Apple silicon M3 chips, although an M2-equipped version of the 13-inch remains available.**

The laptop boasts a silent, fanless design, a six-speaker sound system (the 13in has four speakers) and spatial audio. The 13in M3 features an 8-core CPU, offering 1.6x faster performance than the M1, along with either an 8- or a 10-core GPU, giving it a 5.8% boost in graphics performance. The M3 also benefits from 100GB/sec memory bandwidth. Both M3 MacBook Air models come with 8GB of memory as standard, configurable to 16 or 24GB, and both can be configured with up to 2TB of storage.

The 15in MacBook Air is the thinnest 15in laptop available - 40% thinner than comparable PC laptops; it's just 11.5mm thin and weighs 1.51kg. The 13in Air is 11.3mm thin and weighs 1.24kg. The Liquid Retina display in the 15in MacBook Air has a resolution of 2880x1864 pixels, while the 13in has 2560x1664. Both support up to one billion colours.

Both M3 MacBook Air models come with 1080p FaceTime HD cameras, MagSafe 3, two Thunderbolt/USB 4 ports and a headphone jack and Bluetooth 5.3, and they now support Wi-Fi 6E. You also get up to 18 hours of battery life when viewing video or 15 when web surfing.

Prices for the 13in model start at £1,099, while the 15in starts at £1,299.

MacBook Air 13in £1,099 (Entry level)

Display: 13.6in Liquid Retina with True Tone
Chip: Apple M3 with 8-core CPU (4 performance cores, 4 efficiency cores), 8-core GPU, 16-core Neural Engine
Memory: 8GB (upgradeable to 24GB)
Storage: 256GB (upgradeable to 512GB, 1TB or 2TB)
Ports: 2x Thunderbolt/USB 4, 3.5mm headphone jack

MacBook Air 15in £1,699 (Ultimate)

Display: 15.3in Liquid Retina with True Tone
Chip: Apple M3 with 8-core CPU (4 performance cores, 4 efficiency cores), 10-core GPU, 16-core Neural Engine
Memory: 16GB (upgradeable to 24GB)
Storage: 512GB (upgradeable to 1TB or 2TB)
Ports: 2x Thunderbolt/USB 4, 3.5mm headphone jack

Apple TV 4K

> From £149

> Apple's third-gen little black box with A15 Bionic chip now adds HDR10+ to the mix. Prices now start at just £149 (Wi-Fi only); the standard version now comes with 64GB of storage, while paying £20 extra gets you 128GB, Ethernet and Thread.



Apple HomePod/ HomePod mini

> £99/£299

> Apple's Siri-powered speakers sound great, you can link two for stereo sound, and use them as smart home hubs. The mini comes in five colours; the 2nd-gen Midnight/White HomePod (£299), offers higher spec and spatial audio.



Apple Watch Series 9, Ultra 2, SE

> From £219

> The SE and

Series 9 are water resistant to 50m, but the titanium Ultra 2 is water resistant to 100m. The Series 9 and the Ultra 2 now run on an S9 SiP and boast an Always-On Retina display, and all three offer Emergency SOS and Crash Detection.



EXPECTED
OCT 2024
UPDATED
OCT 2023

MacBook Pro

> From £1,349

> **October 2023 saw the introduction of the M3 chip family to the MacBook Pro.** The new 14-inch M3 model is available with an 8-core CPU/10-core GPU. But if you step up to the M3 Pro option, you can opt for either an 11-core CPU/14-core GPU or a 12-core CPU/18-core GPU, or the M3 Max which has a 14-core CPU/30-core GPU.

The 16in options start with the M3 Pro chip with a 12-core CPU/18-core GPU and either 18GB or 36GB of unified memory. Or you can opt for the M3 Max chip with

either a 14-core CPU/30-core GPU or 16-core CPU/40-core GPU. The unified memory can be upgraded to a max of 128GB on the M3 Max models, while SSD

storage can be upgraded to a max of 8TB on M3 Max models. The 14in M3 and 16in M3 Pro and M3 Max models now offer up to 22 hours of battery life.



MacBook Pro 14in £1,699 (Entry level)

Display: 14.2in Liquid Retina XDR (3024x1964) with True Tone
Chip: Apple M3 with 8-core CPU (4 performance cores, 4 efficiency cores), 10-core GPU, 16-core Neural Engine
Memory: 8GB (upgradeable to 24GB)
Storage: 512GB (upgradeable to 1TB, 2TB)
Ports: 2x Thunderbolt/USB 4, HDMI port, SDXC card slot

MacBook Pro 16in £2,599 (Mid-range)

Display: 16.2in Liquid Retina XDR (3456x2234) with True Tone
Chip: Apple M3 Pro with 12-core CPU (6 performance cores, 6 efficiency cores), 18-core GPU, 16-core Neural Engine
Memory: 18GB (upgradeable to 36GB)
Storage: 512GB (upgradeable to 1TB, 2TB, 4TB)
Ports: 3x Thunderbolt/USB 4, HDMI port, SDXC card slot

MacBook Pro 16in £4,099 (Ultimate)

Display: 16.2in Liquid Retina XDR (3456x2234) and True Tone
Chip: Apple M3 Max with 16-core CPU (12 performance cores, 4 efficiency cores), 40-core GPU, 16-core Neural Engine
Memory: 48GB (upgradeable to 128GB)
Storage: 1TB (upgradeable to 2TB, 4TB or 8TB)
Ports: 3x Thunderbolt/USB 4, HDMI port, SDXC card slot

Mac Studio > From £2,099

EXPECTED
JUNE 2024
UPDATED
JUNE 2023

> **The Mac Studio finally received a long-hoped-for update in June 2023 with the latest model sporting Apple silicon M2 Max and M2 Ultra chips.**

The Mac Studio is up to six times faster than the most powerful Intel-based 27-inch iMac and up to three times faster than the M1 Ultra Studio that preceded it.

The Studio's aluminium body is very compact for a desktop Mac, measuring 197x197x95mm, but it's what's inside that counts. The M2 Max chip has a 12-core CPU, a 30-core GPU (upgradeable to 38-core), and 32GB of memory (configurable to 96GB). The M2 Ultra comes with a 24-core CPU, 60-core GPU (upgradeable to 76-core), and 64GB of



The Mac Studio is Apple's most powerful desktop Mac to date - it's pricy though.

unified memory (upgradeable to 192GB). Storage options on both scale up to 8TB.

The Mac Studio M2 Max starts at £2,099, and the M2 Ultra starts at £4,199, so these machines are not for everyone. But both offer an incredible array of connectivity options and support for the more pro user.

Mac Studio £2,099 (Entry level)

Chip: M2 Max with 12-core CPU (8 performance cores, 4 efficiency cores), 30-core GPU, 16-core Neural Engine
Memory: 32GB (upgradeable to 96GB)
Storage: 512GB (upgradeable to 1TB, 2TB, 4TB, 8TB)
Ports: 4x Thunderbolt 4, 2x USB-C, 2x USB-A, HDMI 2.0, 3.5mm headphone jack, 10Gb Ethernet, SDXC card slot

Mac Studio £4,199 (Ultimate)

Chip: M2 Ultra with 24-core CPU (16 performance cores, 8 efficiency cores), 60-core GPU, 32-core Neural Engine
Memory: 64GB (upgradeable to 192GB)
Storage: 1TB (upgradeable to 2TB, 4TB, 8TB)
Ports: 4x Thunderbolt 4, 2x USB-C, 2x USB-A, HDMI 2.0, 3.5mm headphone jack, 10Gb Ethernet, SDXC card slot



Studio Display

> From £1,499

> **Launched alongside the Mac Studio in March 2022, the Studio Display is a great addition to any Mac set-up.**

Powered by Apple's A13 Bionic and running iOS, it features a 27-inch Retina display with 5K resolution (5120x2880 pixels) and True Tone, a 12MP Ultra Wide camera with Centre Stage, and a six-speaker sound system with support for spatial audio. A range of stand options are available, and you can choose nano-texture glass for £250 more.



iPad/mini

- > iPad (10th gen) From **£499**
- > iPad mini From **£569**

> **Apple celebrates the iPad's 10th incarnation by increasing the display to 10.9in and boosting its internals to an A14 Bionic chip.** You now get an Ultra Wide 12MP front and updated 12MP back camera. The iPad now also finally adopts the USB-C port, and comes in Blue, Pink, Yellow and Silver. Prices start at £499.

The iPad mini is like a shrunk down iPad Air, with an all-screen design centred around its 8.3in Liquid Retina display. The £569 version comes with 64GB of storage (but can be upgraded to 256GB), comes with a 12MP Wide camera, second-gen Apple Pencil support and USB-C charging.

iPad Air > From £669

> **Like the iPad, iPad mini and iPad Pro, the iPad Air has an all-screen design that makes the most of its 10.9in Liquid Retina display.** Inside its super-slim chassis, you'll find the same Apple silicon M1 chip as the entry-level MacBook Air and Mac mini. Plus it's available in a choice of storage options (64GB or 256GB), has 802.11ax Wi-Fi (aka Wi-Fi 6) and Bluetooth 5.0 onboard, and there are Wi-Fi+Cellular variants with 5G starting at £719.

The iPad Air also supports Apple's second-gen Apple Pencil and can be teamed with Apple's Magic Keyboard for powerhouse productivity on the go. Augmented reality fans will love its LiDAR-equipped 12MP Wide camera, plus it also has Centre Stage.

iPad Pro > From £899

> **Apple's priciest iPad is also its most fully featured.** Available in 11in and 12.9in sizes, the iPad Pro models now boast M2 Apple silicon, which turbocharges the performance, and iPadOS 16 enables the Apple Pencil 'hover experience'.

The 12.9in model's Liquid Retina XDR display boasts miniLED backlighting, but even the 11in model gets 120Hz ProMotion refresh rates, plus a Thunderbolt/USB 4 port for charging and connection to a wide range of external devices. And both support the second-gen Apple Pencil, Magic Keyboard, and Centre Stage. The 12.9in now makes an even greater MacBook replacement.

iPad

Display: 10.9in
Chip: A14 Bionic
Storage: 64GB, 256GB
Ports: USB-C
Unlocking: Touch ID

iPad mini

Display: 8.3in
Chip: A15 Bionic
Storage: 64GB, 256GB
Ports: USB-C
Unlocking: Touch ID

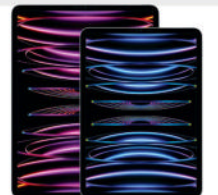
iPad Air

Display: 10.9in
Chip: Apple M1
Storage: 64GB, 256GB
Ports: USB-C
Unlocking: Touch ID



iPad Pro

Display: 11in or 12.9in
Chip: Apple M2
Storage: 128GB-2TB
Ports: Thunderbolt 4
Unlocking: Face ID



Apple Smart Folio

> From **£69**

> Available in a range of stylish colours, these wrap-around magnetic cases will keep your iPad, iPad mini, iPad Air and iPad Pro looking good for years, and they double as handy stands.



Apple Pencil

> From **£79**

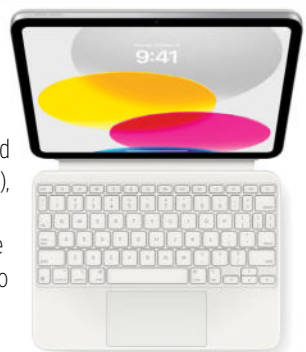
> Apple has recently released a more affordable Pencil with USB-C charging, although the pricier 1st- and 2nd-gen variants are still available. The Pencil brings accuracy to iPad interactions, making it great for sketching, painting and handwritten notes.



Apple Magic Keyboard

> From **£279**

> The Magic Keyboard (for iPad Air/iPad Pro), comes with backlit keys and easy-to-use trackpad. There's also a Magic Keyboard Folio for iPads.



EXPECTED
MAR 2025
UPDATED
MAR 2022



iPhone SE

> From £429

> **Apple's most affordable iPhone is now even better value, thanks to a September price reduction of £20. As with the iPhone 14 range, the SE works on an A15 Bionic chip.** The iPhone SE offers plenty of the things people love about iPhone, including iOS's phenomenal ease of use. There's only a single 12MP Wide main camera and no Night mode, but you do get True Tone, a Photonic engine, and 4K recording.

Battery life is decent too with the iPhone SE lasting for up to 15 hours between recharges (with Qi wireless charging onboard too). The main thing the iPhone SE misses out on is Face ID unlocking, making do with Touch ID on the Home button instead.

EXPECTED
SEPT 2024
UPDATED
SEPT 2023



iPhone 15/Plus

> iPhone 15 From £799
> iPhone 15 Plus From £899

> **In September, Apple launched its iPhone 15 range. The base model retains its 6.1in screen, and the Plus stays at 6.7in, while both handsets are still of an aluminium build.**

Both models now benefit from the Dynamic Island, while the dual-camera system has been improved with a 48MP Main camera and a 12MP Ultra Wide, plus a Photonic Engine for low-light images and Smart HDR 5. The iPhone 15 lasts for up to 20 hours when playing video playback; the Plus up to 26. And the best news? The 15 and 15 Plus are each £50 cheaper than the 14 and 14 Plus before them.



EXPECTED
SEPT 2024
UPDATED
SEPT 2023

iPhone 15 Pro/Pro Max

> iPhone 15 Pro From £999
> iPhone 15 Pro Max From £1,199

> **The iPhone 15 Pro and Pro Max boast a lightweight titanium shell with a textured matt glass back.** There's now a new fast Action button on the side of the handset that acts as a handy physical shortcut.

The quad-pixel sensor on the Main camera provides 48MP, 12MP Ultra Wide, 12 MP Telephoto with up to 5x optical zoom on the Pro Max. The 15 Pro and Pro Max are powered by a graphics-friendly A17 Pro chip. Video playback times remain at up to 23 hours for the Pro, while the Pro Max can keep going for 29.

iPhone SE

Display: 4.7in
Chip: A15 Bionic
Storage: 64GB-256GB
Connectivity: 5G, Wi-Fi
Unlocking: Touch ID



iPhone 15

Display: 6.1in
Chip: A16 Bionic
Storage: 128GB-512GB
Connectivity: 5G, Wi-Fi
Unlocking: Face ID

iPhone 15 Plus

Display: 6.7in
Chip: A16 Bionic
Storage: 128GB-512GB
Connectivity: 5G, Wi-Fi
Unlocking: Face ID

iPhone 15 Pro

Display: 6.1in
Chip: A17 Pro
Storage: 128GB-1TB
Connectivity: 5G, Wi-Fi
Unlocking: Face ID

iPhone 15 Pro Max

Display: 6.7in
Chip: A17 Pro
Storage: 256GB-1TB
Connectivity: 5G, Wi-Fi
Unlocking: Face ID

Apple Vision Pro

> \$3,499

> Marking the start of what Apple hopes is a new era of spatial computing, the Vision Pro is now available in the US. Equipped with a custom 23 million pixel microOLED display, the twin lenses inside the Vision Pro boasts better than 4K resolution and it

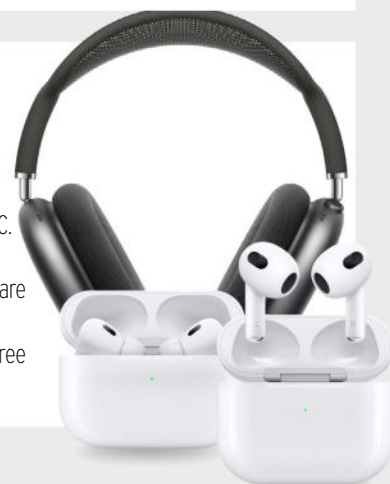


has spatial audio onboard too. Driving the whole thing are Apple silicon M2 and R1 chips, upon which sits an entirely new OS: visionOS.

Apple AirPods Max/AirPods Pro/AirPods

> £499/£229/From £169

> The AirPods Max are super comfy and boast Transparency Mode and ANC. The second-gen AirPods Pro add in Adaptive Audio. The third-gen AirPods are available with either a Lightning (£169) or MagSafe (£179) charging case. All three come with personalised spatial audio.



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 ★★★★★ MF391



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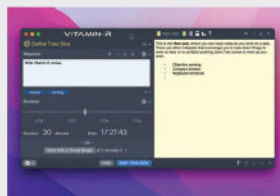
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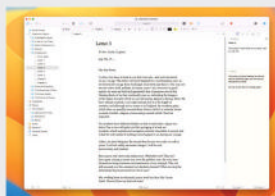
- Satechi 200W USB-C 6-Port PD GaN**
 > **£159.99** > MF392
 > satechi.net
- Anker 737 Charger GaNPrime 120W**
 > **£84.99** > MF392
 > anker.com/uk
- Ugreen Nexode 200W USB-C Desktop**
 > **£199.99** > MF394
 > uk.ugreen.com

BEST BUYS... Third-party Mac apps >

> **PHOTO EDITOR**
Luminar AI
£9.99/month skylum.com
 > If you want to improve your photos without spending too much, this is the app for you.
 ★★★★★ MF361



> **PRODUCTIVITY TIMER**
Vitamin-R 4.14
£27.95 (about **£30**)
 publicspace.net
 > Break your working day up into short bursts of distraction-free activity.
 ★★★★★ MF384



> **WRITING APPS**
Scrivener
£49.99
 literatureandlatte.com
 > A genuinely outstanding app that has almost everything you could ever need. ★★★★★ MF385

> **OUR TOP 3**
VIDEO EDITORS

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 > wondershare.com
- HitFilm (Creator)**
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 > fxhome.com
- Lightworks Create**
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> **VIDEO EDITOR (iOS/IPADOS)**
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> A powerful and reasonably priced video-editing suite. Existing users can upgrade for free.
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> **NOTE-TAKING (iOS/IPADOS)**
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> Notability is a superb note-taking app with lots of flexibility. It's ideal for a variety of projects.
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> **SCANNING/OCR (iOS/IPADOS)**
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£8.99 grizzllylabs.com

> Fast, flexible and useful scanning with good optical character recognition (OCR).
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Affinity Publisher 2
£17.99 affinity.serif.com

Serif's page layout app finally arrives on iPad and it's great - even if the interface takes some getting used to.
 ★★★★★ MF391



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£4.49/month captureone.com

> A comprehensive photo editor offering powerful Raw conversion and desktop-quality editing tools on the iPad.
 ★★★★★ MF384



> **RSS READER (iOS)**
Reeder 5
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> Version 5 brings minor, but welcome improvements to an already great RSS news-reader app.
 ★★★★★ MF361



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One more thing HomePod

Graham Barlow isn't holding his breath for the next HomePod

There are rumours circulating that a new HomePod speaker featuring a screen is on the way from

Apple any day now... While I think there almost certainly will be a new third-gen HomePod from Apple at some point, the idea that it's imminent? Well, I'd take that with a Cupertino-sized dose of salt. With HomePod, Apple really doesn't seem to follow the same yearly update schedule it does with the iPhone, or even feel the urge to follow any schedule at all.

Let's just recap the history of the HomePod. First released in 2018 as a response to Amazon's Alexa-powered Echo speakers, but featuring Siri, it turned out to be nice luxury item, but also too expensive and a little too limited for anybody to really want one. If anything it simply highlighted that you could do more with Alexa-based speakers than you could with Siri ones, so Apple quietly killed it while introducing something else instead. The smaller, cheaper, HomePod mini appeared in 2020. It still cost more than cheaper Amazon rivals but it filled the home speaker-sized gap in the average Apple owner's life. Then, in February 2023, Apple mysteriously resurrected HomePod with a second-gen version. While its specs had been updated from the 2018 model that had preceded it, it really wasn't that different. What was Apple's motivation here? I'm asking because nobody seems to know.

AI wait for next model

Now we're more than a year on since the return of the HomePod and the rumour mill has ramped up, and people are getting excited about the idea of a third-gen HomePod featuring a screen. While Amazon has had the Echo Show on the market for ages (an Alexa speaker with a screen that can do video



There are rumours circulating that a new HomePod release is imminent, but Apple might be holding back for further AI advances.

calls), Apple still hasn't responded with a similar version of HomePod. It makes sense for Apple to meet the challenge, but my guess is that Apple is waiting for AI development to get to the point where Siri can benefit from it before it launches a new HomePod. That would deliver a real step up in performance, but it's going to take time. I wouldn't expect to see one on the market until we're well into 2025.



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