

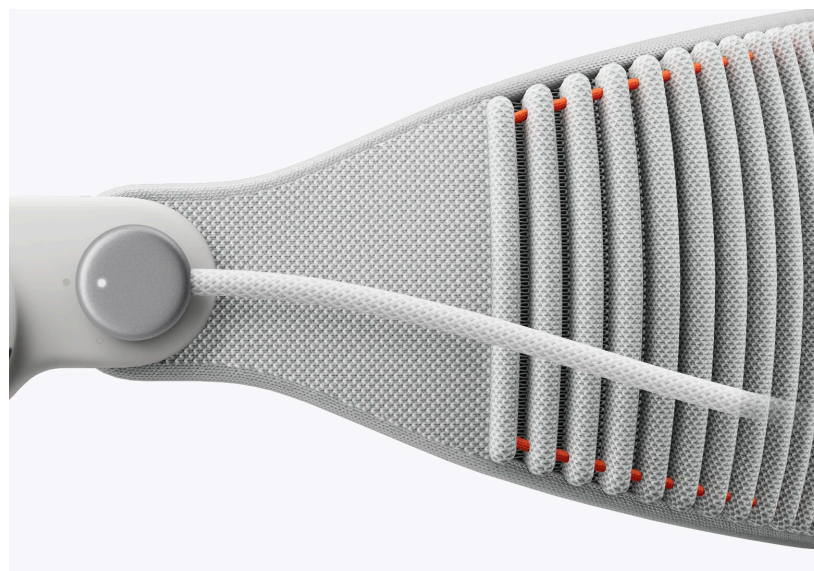
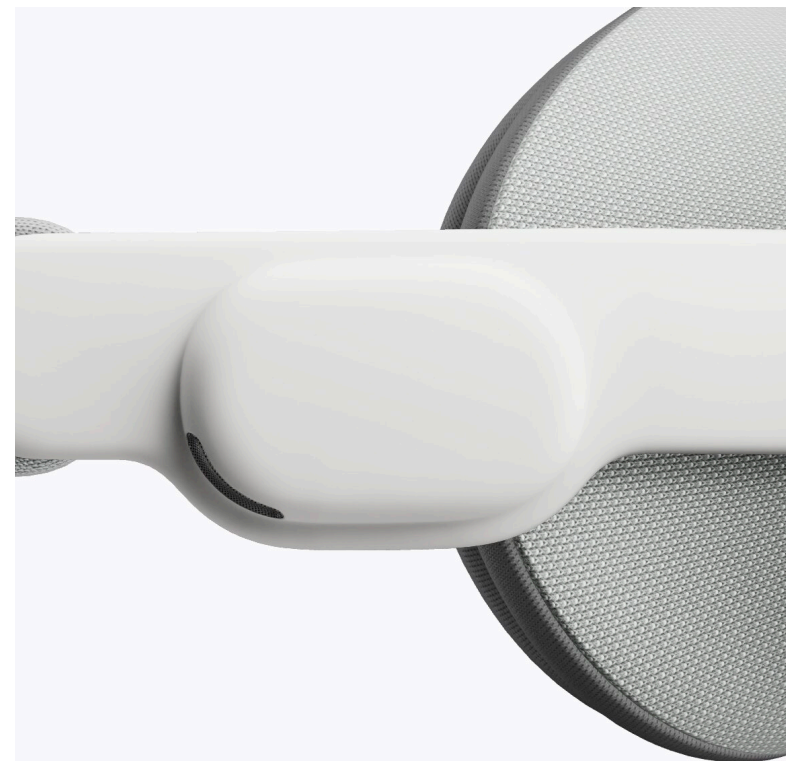


market
info



Valued

What was
announced
at this year's
Keynote? (pt 2)



HARDWARE

Last month we talked about the Mac's and started discussing Apple's new Vision Pro headset. In this issue, we are going to go over the remainder of Apple's WWDC 2023; the software updates that are coming to Apple products and starting with the hardware for Vision Pro and whether it justifies the \$3,499.00 price tag!

So, let's begin. First up, the displays. Apple has packed in high resolution micro-OLED display system which produces 23 million pixels across the two displays which themselves are no larger than a postage stamp. This combined with catadioptric lenses produce 'incredible sharpness and clarity'. Lenses like this are usually seen in telescopes, microscopes and telephoto lenses. Unfortunately, it seems Apple have not built-in any room for those of us who use glasses instead stating that separate lenses designed by Carl Zeiss will be available. These will cost extra though.

Alongside the amazing visuals, Vision Pro comes with an advanced Spatial Audio system. Each Audio Pod features two individually amplified audio drivers which delivers personalised Spatial Audio based on the users individual's own head and ear geometry. In the small print Apple do state that in order to create this personal profile an iPhone with a TrueDepth camera is required. So, another potential added cost on top of the Zeiss optics, Although, anybody willing to spend the \$3,499.00 on this is likely to have the latest iPhone I suspect.

The eye tracking system which is supposed to be industry leading is enabled by an array of high-speed cameras and ring of LED which project invisible light patterns on the users eyes. Powering everything is an M2 chip and a

brand new chip dubbed R1. This chip processes the input from the 12 cameras, five sensors, and six microphones to ensure the content appears to be floating in the user's field of view, all in real time. New images are displayed to the displays within 12 milliseconds.

EyeSight is a feature I can see being immediately removed if Apple are to go ahead and release a cheaper 'Vision'. If someone approaches the user the feature makes the device feel transparent. The user sees them, whilst the other person sees the user's eyes through the outward facing OLED display. A nice feature, but another display on the outside seems to me like an easy way to cut the cost down to a more friendly mass market price!

The design of the Vision Pro also appears to be very high end. A single piece of laminated and polished glass adorns the front and blends in to the headset's aluminium chassis. The Light Seal also comes across as equally premium constructed of a soft textile which comes in a range of shapes and sizes ensuring it provides a precise fit. The straps are flexible ensuring a snug but comfortable fit for the audio to be close to the user's ears. Finally, the HeadBand is three-dimensionally knitted so it is cushioned, breathable and can stretch. It is available in multiple sizes and is secured with a simple mechanism making changing very easy. Finally, Vision Pro is designed for all day use via the included power cord, or wireless use for two hours on the high capacity battery.

Vision Pro is slated for launch in the US in early 2024 with more countries to follow. It is an intriguing device, but if they want 'Spatial Computing' to go mainstream, then that price is going to have to come down!

WWDC is often an event that focuses on

software updates and Apple had a number of these to discuss across the board.

Apple Watch continues to be extremely popular and later this year watchOS 10 will add new watch faces, redesigned apps and add a new Smart Stack. There will also be new cycling and hiking features as well as new tools for supporting mental health.

A completely new design language across Apple Watch gives users more information at a glance, and simplified navigation. The new Smart Stack feature contains widgets offering quick access to a user's relevant information and can be navigated with a turn of the Digital Crown. They also change depending on the user's context so at the beginning of the day they will show the day's forecast and if at an airport the Smart Stack will show boarding passes straight from the Wallet. Upcoming meetings or tasks in Calendar or Reminders will shuffle to the top of the Smart Stack as will any apps that are running like Music or Podcasts. The new Smart Stack also makes users of watch faces like Portrait a more convenient way of accessing information, something that has been lacking from them since they were introduced.

The new design language gives



developers the opportunity to update their apps to be better use the whole display of Apple Watch. The two new watch faces are Palette and Snoopy. Palette displays the time in three overlapping layers and the colours shift as the time changes. The Snoopy watch face features Snoopy and Woodstock from the Peanuts cartoon whom interact with the watch hands, react to weather and get active when the user is working out.

New metrics are being added for cyclists with it showing up as a Live Activity automatically on iPhone. Users will see their Heat Rate Zones, Elevation, Race Route, Custom Workouts and a new Cycling Speed view for when the phone is mounted to a bike. Hiking gets a new Last Cellular Waypoint Location which estimates where there was last reception and in case of emergencies a feature called Last Emergency Call Waypoint estimates where the watch last had reception to any network so an emergency call can be made. Finally a new Elevation view provides altimeter data providing a three-dimensional view of saved waypoints.

These are just some of the long list of new features coming to watchOS 10 later this year.

Most likely to be the most popular update across all of Apple's software updates announced the latest version of iOS is imaginatively called iOS 17.

I'm not really sure when Apple last updated the Phone app, but it is getting a major makeover with iOS 17. Brand new personalised Contact Posters allow users to customise how they appear on incoming calls with treatments to photos or Memoji, and there are options for typography and font colours. They will also carry over to third-party call apps. Live voicemail provides users with a live transcript as someone is leaving a voice message with the option to pick up the call or not. Spam calls identified by carriers will not appear as Live Voicemail. The feature is powered by iPhones Neural Engine and is entirely private as it is handled on device.

FaceTime calls now support voice and video messages so if someone cannot get through they can leave a message. Reactions can now be used whilst on FaceTime calls with options for balloons, hearts, fireworks, lasers which can be activated by simple gestures. FaceTime is coming to AppleTV with the aid of Continuity Camera.

Messages is getting some new features. Users will be able to create Live Stickers by plucking subjects from photos and new effects can be added for some flair. A new drawer in the keyboard collects all of your stickers in one place allowing them to be used across iOS. A new catch up arrow indicates where conversations last left off and users will be able to reply in line by swiping a text bubble. Locations shared will update in real time in the conversation and sent audio



messages will be transcribed in real time. A new feature called Check In allows users to notify that they have arrived at their location safely. Friends or family will also receive notifications of any delays.

AirDrop is getting some enhancements. NameDrop will allow users to share their contact information with each other by bringing their iPhones together or iPhone and Apple Watch, and with the same gesture they can share content. SharePlay can also be initiated for sharing music, starting a movie or playing a game!

A brand new StandBy feature will be coming with iOS 17 which will provide users with a full screen experience whilst iPhone is on its side and charging. Users will be able to personalise it with a range of clock faces, their favourite photos or widgets, which will also include Smart Stacks which will highlight the right widgets at the right time. When charging with MagSafe, StandBy remember the preferred view. With iPhone 14 Pros Always-on-Display the information provided by StandBy is always available.

A new app called Journal is coming to iPhone with iOS 17. On-device machine learning will provide personalised suggestions for journal entries. These suggestions are curated from recent activity like photos, people, places you have been and recent workouts which make starting an entry easy. The app can be locked and with the on device processing, and end-to-end encryption nobody can view a users journal entries including Apple.

iOS 17 will launch later this year, most likely besides new iPhone 15 and 15 Pros.

macOS

Apple's latest update to macOS is focusing on allowing users to customise their experience via widgets and brand new screen savers, big updates to Safari, and video conferencing as well as an optimised Game Mode.

With macOS Sonoma, users will be able to place widgets anywhere on their desktop and access them easily via the widget gallery. Widgets will blend seamlessly with wallpapers whilst users work and via Continuity, the wealth of widgets of iOS widgets are available for Mac users. Widgets will also be interactive allowing users to check off tasks, play and pause media and all sorts of other things, directly from the desktop.

Video conferencing will receive enhancements to presentations that work across a variety of video conferencing apps. Presenter Overlay is the first new feature which is a video effect that places the presenter directly in front of the content they are presenting. Reactions will also be able to be used so users can visibly share how they feel. An improved Screen Sharing picker makes sharing apps simpler during calls by allowing users to simply click on the green button on the top left corner and selecting to share it in the call.

Safari is getting its biggest update in a while. Private Browser will provide greater user protection against both trackers and those who might have access to a user's device

and with advanced tracking and fingerprint protections in Private Browsing, users will be better protected from websites that try to track or identify them. Private Browsing windows will also now lock when not being used. Users will also be able to set up different profiles so if they use a computer for both work and personal use they can set these profiles that keep cookies, extensions and favourites etc. separate. These profiles can be switched between easily. Safari will also allow for the creation of web apps that will have them behave like normal apps as well as creating an app icon.

A range of new screen savers are coming to macOS featuring slow motion videos of places like Hong Kong, Monument Valley or the hills of Sonoma in California where the operating system takes its name. These appear to be what we have seen previously on Apple TV.

The new Game Mode coming to macOS Sonoma will deliver an optimised gaming experience by giving more access to the computers CPU and GPU for smoother frame rates with more consistency. How this fares remains to be seen but the graphics capabilities across the Mac range has been improving vastly over the years. This does seem to be another step towards Apple taking gaming on Mac more seriously so fingers crossed this trend continues.

These are just a few of the many new features coming to macOS Sonoma which launches later this year!



SONOMA

Also getting an update is the operating system for iPad. It's perhaps not the most exciting update with updates to the lock screen and interactive widgets, new features in PDFs and Notes with updates to Messages, FaceTime and Safari. One thing worth mentioning is the Health app is finally making its way to iPad.

With iPadOS 17 users will be able to personalise their Lock Screen with their favourite photos and be able to style them in new ways. They can set multiple photos that will shuffle throughout the day or even use Live Photos. A wallpaper can also be chosen from the Lock Screen gallery and be able to choose from a range of font types and colours to customise the time like we saw previously with iOS 16. Live Activities are also coming to iPads.

Interactive widgets will be making their way to iPad so users will be able to play/pause music, control their smart home straight from the Home Screen or Lock Screen and like macOS Sonoma the widgets will blend seamlessly with the wallpaper with adaptive tinting.

Working with PDFs in iPadOS 17 is set to be easier with machine learning able to identify fields so that users can enter details like names, addresses, emails from Contacts. Notes will also get new tools for collaborating, organising, annotating and reading PDFs. PDFs will open full width so pages can be easily flicked through, make it easier to annotate or use Apple Pencil to mark-up or sketch, and with live collaboration changes will appear in real time.

The updates to Messages in iOS 17 are also coming to

iPadOS

17



iPadOS 17 like Live Stickers, and the new drawer in the keyboard for storing them. Live messages will also be transcribed like in the smaller operating system. The same can be said of FaceTime which also receives the capability to leave an audio or video message and access to Reactions. iPad will also function as a camera powered by Continuity Camera if wanting to make a FaceTime call from AppleTV 4K.

Like macOS Sonoma, Profiles are coming to Safari in iPadOS 17 as are the new Private Browsing features and users will be able to lock the window they are viewing with Face ID or Touch ID.

As previously mentioned, the Health app makes its way to iPad. It has been designed to utilise the display of iPad display. Favourites has a new look with views of Trends, Highlights and interactive charts. Developers will be able to make use of HealthKit to create new experiences for their apps that fully utilise iPad.

iPadOS 17 launches later this year with what we've outlined here and a range of other features.

INSTA360



Vlogging has gotten very popular in recent years which has seen once beleaguered companies like GoPro go from being in trouble in 2018 to getting back on track with the introduction of a subscription model for high-usage customers that provided cloud storage, camera repairs and premium editing tools.

A newer player in the market is Insta360 founded in 2015 which as the name suggests is a company that specialises in 360° cameras and action cameras. The latest action camera from the company replaces the Insta360 Go 2 and features better battery life, a new 'Action Pod' as well as a magnetic mounting system. This model looks to solve many of the issues users had with the previous model.

Battery life has been increased across the board. The main camera's capacity has been increased to 310mAh up from 210mAh on the previous model. The charging case has also seen its capacity increase to 1270mAh from 1100mAh on

the previous model. These increases equate to an extra 15 minutes of 1080p 30fps footage in the main camera whilst the Action Pod adds an extra 20 minutes over the previous charging case.

The new case called the Action Pod also serves another purpose beyond just storing, remote control, charging, and serving as a tripod. It features a flip touchscreen for live preview of footage from the camera or making vlogging easier as users will now be able to see themselves and their surroundings as they record. Video quality has been increased to 2.7K which increases the pixel count to 2720x1536 from 1440p on the previous model. The new model also now features two microphones whereas the original only had one. Whilst quality is not likely to be best from such a small camera, the improvement will likely be a welcome addition to the range, and besides, a lot can be done in editing software these days.

The feature that will really push creativity to another level with this action cam is the magnetic mounting system and three

included accessories; the Magnet Pendant, the Easy Clip and Pivot Stand. The Magnetic Pendant can sit under a user's clothes allowing the camera to clip on for easy first person views. The Easy Clip is ideal for attaching to a cap which would provide great angles for first person videos. In fact there is a well known YouTuber who uses the previous model to showcase his height and people's reaction to it (he is over 7ft). The Pivot Stand features a suction cup and can be stuck to any flat surface for filming from unique angles.

Being an action camera, it is expected it will be put through its paces with the Action Pod rated IPX4 and the camera being IPX8 waterproof to 16ft. This can be increased to 60m with the separate Dive Case which will house both the camera and the Action Pod.

The Insta360 Go 3 is available now starting at £379.99/ AU\$659.00 with a range of kits available, as well as 32GB, 64GB, or 128GB capacities which also raise that starting price.