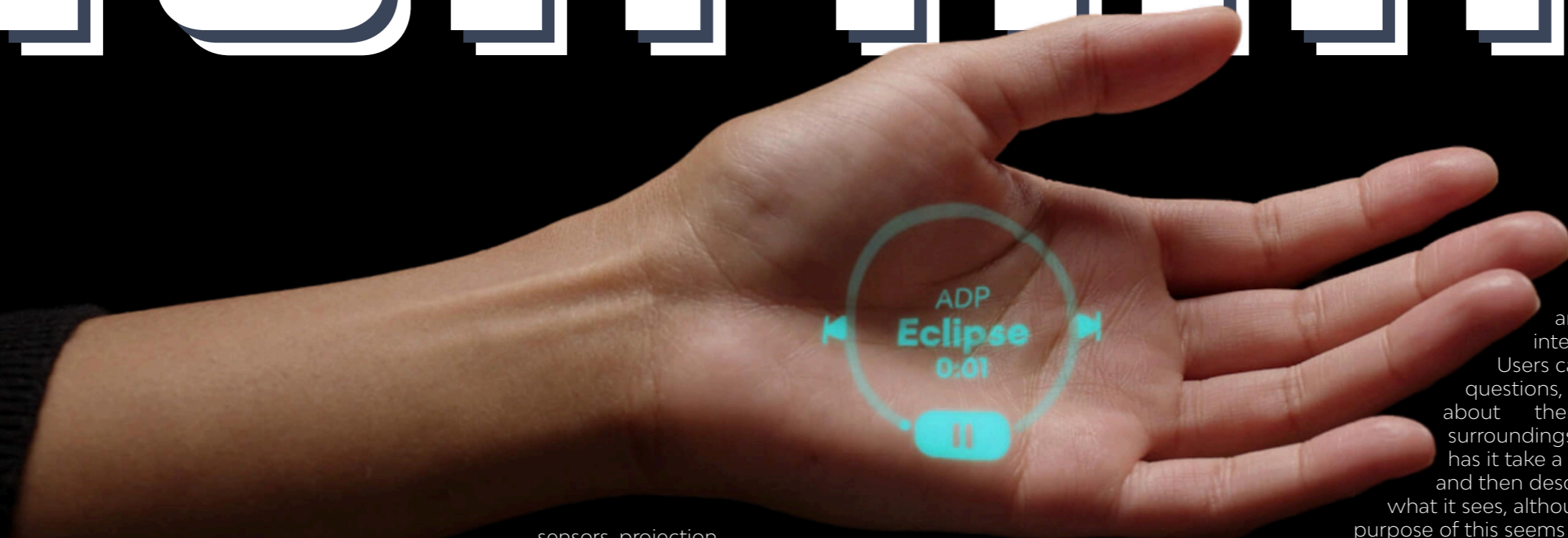




**AI PIN**

# HUMAN.MACHINE



His YouTube video titled "The worst product I have ever reviewed", but what is the Humane AI Pin, and what are the reasons for this?

**A** new AI Pin has just hit the market "to solve problems that don't really exist" and in some reviewers words. The release of the new device has caused some ripples on the internet, but not in the way you would expect. The reviews have not been stellar, and one reviewer in particular is being accused of potentially sinking the new startup based on his criticism,

The AI Pin is a very small device consisting of an aluminium housing, a small textured touchpad, and an area housing its optical sensors, and and its Laser Ink Display; a projection system designed to beam information onto a users hand. The range of sensors is extensive with an ambient light sensor, accelerometer, gyroscope for detecting motion, magnetometer and GPS for position, and a 3D depth sensor. The optical

sensors, projection system and touchpad are all protected by Corning Gorilla Glass Victus. To attach to clothing the AI Pin comes with a two magnetic battery boosters, but two separate accessories, the Latch or Clip are available for different clothing types. There is also a number of lights on the device that are triggered when the device is in use. The 'Trust Light' is designed to let both the user and those around them that it is in use, changing colour depending on the function currently. A second smaller light, the 'Beacon' quietly informs the user of incoming messages or alerts. There's an inbuilt dual microphone array and a speaker system which uses an HTRF (Head Related Transfer

Function) to create a small bubble of sound at a fixed distance. Both of these allow users to make calls over LTE or 3G. Connectivity is well served to, with in-built LTE, WiFi 5 and Bluetooth 5.1, GPS and Glonass, Assisted GPS and Humane Wireless Service, more on this later. So, features wise the Humane AI Pin looks good and it's well made, but let's talk about what its purpose is.

The Ai Pin acts like a wearable Siri button that you can talk to, the primary way to interact with it, with a built-in projector that beams information onto a users hand. In Humane's own words it's "the first wearable device and software platform built to harness the power of

artificial intelligence". Users can ask it questions, or even about their surroundings which has it take a picture and then describe what it sees, although the purpose of this seems to be quite limited. It can also translate languages. The UI is quite unique and is projected on to the palm of the hand with gestures like rolling your palm moving around the options available, and a clench of the fist making the selection.

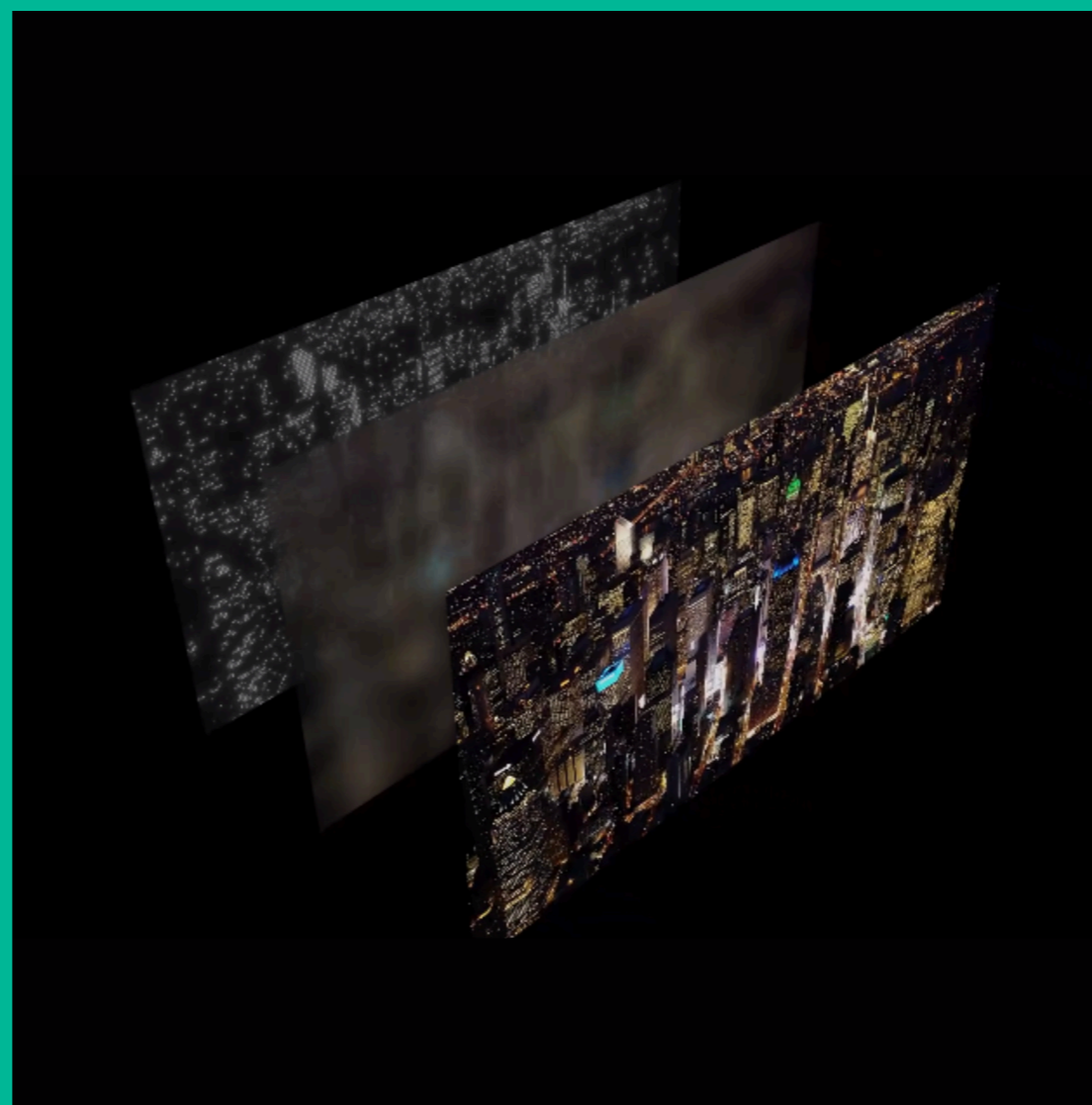
So it sounds pretty neat to, but unfortunately reviewers are already highlighting many of its problems. First of all, it's actually quite expensive at \$799.00 for the device and a further \$24.99 per month for the required data plan (the aforementioned Humane Wireless Service). That's new smartphone territory! It also is reported to get answers to questions wrong quite a lot which is made even more painful by being quite slow to

come back with a response, as it searches the cloud for its response. This is worse when out and about in noisy environments.

Photos and videos are reported to be quite bad especially in low light. Video clips are also restricted to 15 seconds. The projector whilst being an interesting vehicle for a user interface can be difficult to read, especially in harsh light. Battery life is also bad, very bad and can be very inconsistent requiring multiple battery swaps throughout the day. Suddenly the inclusion of two battery boosters makes sense, but if these are not cutting the mustard then it's already not a good sign. Whilst in use as well the device gets hot which actually concerned reviewers whilst they tested it. So all in all it looks like the Humane AI Pin is in need of some major updates for it to be a viable device. That's if the company still exists after its first product release.

Whether Marcus Brownlee's review does indeed sink Hu.ma.ne remains to be seen, but it certainly seems like something that they might have wanted to spend a little more time cooking prior to releasing it to market!

# 4000



**S**ony's new range of televisions has been announced and something that's very interesting about the new range is that at the very top of it are new mini-LED models, not OLED models. This is significant as it demonstrates how confident Sony is with how far its Mini-LED technology has come.

The new Bravia 9 TVs are a result of some of new developments, the first being last year's BVM-HX3110 professional mastering monitor which is capable of 4,000 nits peak brightness, and is used for mastering movies. The second development is Sony's new XR Backlight Master Drive with High Peak Luminance. This is capable of a 50% brightness boost over the previous flagship mini-LED model as well as an increase of 325% in micro-dimming zones by way of a new 22-bit LED driver. Previously, movies were mastered at 1,000 nits, a limitation imposed by the limits of the previous industry standard monitor, the BVM-HX310 according to Sony. With the introduction last year of the new monitor, that's no longer the case and Sony's new televisions will be up to the task, and Sony recently demonstrated this difference upon their announcement. They also made a comparison with Samsung's 2023 flagship mini-LED and it's reported that the Sony was notably brighter and higher resolution owing to the new XR Backlight Master Drive's superior local dimming performance.

The new models are available to pre-order now starting at £4,499.00 for the 75-inch and £4,999.00 for an 85-inch. It seems the 65-inch is not making an appearance in the UK at this time and release and pricing in Australia is still to be announced.

# 360° 8K IS HERE

**A**ction camera company Insta360 is back at it again launching a brand new camera that's capable of shooting in 8K 30fps. More of an iterative upgrade on the previous X3 model, but for many the improved resolution might just be enough to warrant the upgrade.

The batteries capacity has been increased to 2,290 mAh which is rated for 75 minutes of 8K footage. The camera can also shoot 5.7K at 60fps which the battery is rated to be capable of for 135 minutes. 4K footage will run at 100fps, and users can also just shoot on the one camera at 4K 60fps, and a Me Mode shoots 180° video whilst hiding any selfie stick that is in use, but unlike the X3, the new X4 can shoot this in both 4K and 2.7K. Stills of 72MP in 360° are possible and the X4 features in camera AI noise reduction. Take a picture, or even start shooting with a new Gesture control feature. The cameras FlowState stabilisation has been improved and Insta360 have highlighted this feature by showing it attached to a running dog with before and after. The difference is dramatic! 360° Horizon Lock allows users to do flips, somersaults, any gravity defying act, all whilst the video remains level

regardless of what they are doing.

The action cameras screen size has been increased over the previous model coming in at 2.5-inches, and is protected by Corning Gorilla Glass. One thing that will be welcome for those who are particularly active is a new layer of protection in the form of removable lens guards a set of which come in the box. Also available are Premium Lens Guards, constructed of tempered glass which are scratch resistant and tougher than the included plastic ones. These ensure that image quality and the cameras lenses are protected. They don't cost the earth coming in at an additional £34.99/AU\$61.99. There's a full range of additional accessories including a dive case which is rated up to 50m, a utility frame for more rugged protection as well as featuring cold shoe mounts on both sides, and a fast charge hub for charging up to 3 batteries at a time, 80% of charge in just 26 minutes or 100% in 43 minutes.

The Insta360 X4 is available now starting at £499.99/ AU\$879.99 for the starter bundle. There's a range of bundles available for just about every adventure you can think of.



# REMOVABLE

**A**pple has just been spotted applying for a new patent. Whilst this is just an application at this time, and Apple makes thousands each year, it's still something I think that's worth getting excited about. This is a step that would be good for the environment, consumers and of course if it was to come to fruition, I'm sure Apple would capitalise on it as well. User replaceable batteries would be very welcome given that the last time we saw this in an Apple product was in the 2009 MacBook!

The patent application shows the picture (fig. 1) that highlights a number of devices, all of which will feature a standardised battery system that will allow batteries between keyboards, mice and even a monitor (or computer) to be interchangeable all highlighted as "C" Battery. It also shows a smartphone with a different "D" Battery. Perhaps this variant might be used across smartphones and tablets. Another image (fig. 2) gives a closer look at the battery packs themselves. They consist of a shell and end cap which holds the battery core. The core features sensors, sensor

terminals and positive and negative core terminals. The patent also describes a system for wireless communication between a charger or host computer, allowing for wireless charging, but also a similar system that is used to display battery power. Think of the interface that displays AirPods in Control Centre.

One area that does not look to be catered for is Apple's AirPods line. Arguably a product line where it would be extremely beneficial as their lifespan is quite finite. Sure, they can be sent to Apple for battery replacement, but the reality is this service is only for problems that arise, and does not cover normal wear and tear to the battery. Also, Apple just swap the units out and send the ones off to be recycled. Apple are not alone in this issue. All wireless earbuds are small, as are the batteries but as a product category it has exploded over the years into a huge global market. Apple themselves have sold over 400million units pairs since their introduction.

I look forward to seeing more on this. User replaceable batteries would prolong device lifespans, and overall, and can only be a good thing!

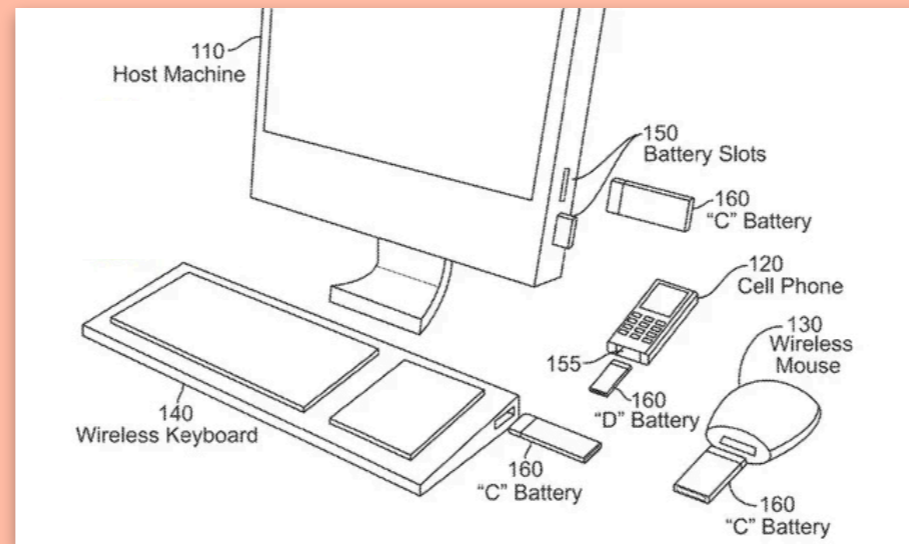


FIG. 1

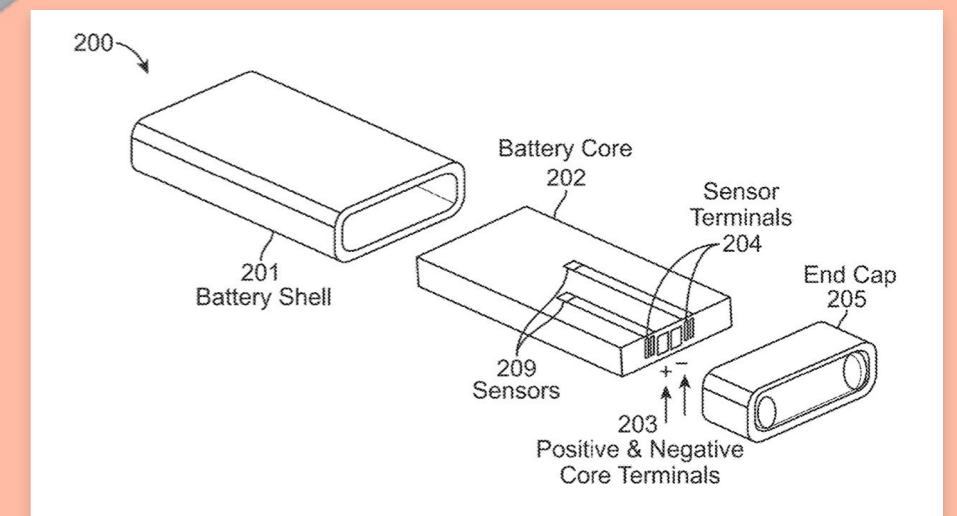


FIG. 2

# BACK TO THE 90S



It's a music system that always had a bold design. The idea coming to B&O industrial designer David Lewis in 1995, as he walked past a music shop in Soho seeing 6 CDs lined up in a row. He imagined what would it look like if "you could put your music on display, instead of hiding it away in a black box". A year later the BeoSound 9000 was released and has been seen in various movies in the background. Christian Bale's Bruce Wayne had one in his apartment in *The Dark Knight*. It can also be seen in *The Big Lebowski*, and *About a Boy*, and it's even a transformer in *Transformers: Dark of the Moon*. Unfortunately, along with the BeoSound 3200, it was discontinued in 2011, the year David Lewis passed, purely coincidental. This was the time B&O started their digital journey, which frankly has led to products that just don't have the same appeal as the brand once did. This month, B&O have created a limited run of

this iconic music system which will come complete with a set of BeoLab 28s, and an integrated BeoConnect Encore in order to connect the BeoLab speakers. The BeoSound 9000c is a recreation of the original bringing the old classic into a new era. This recreated classic will be limited to a run of just 200 units, which is just as well given the price tag. Coming in at a whopping £45,000/AU\$84,300 taking out what BeoLab 28s currently costing £14,500/AU\$31,600, the recreated BeoSound 9000c costs about £27,000/AU\$53,000 more than its original cost, and I'm failing to see why! Original BeoSound 9000s reconditioned with new lasers can be picked up for around the £3,000/AU\$5,000 mark and would likely last for many years if properly looked after.

On the one hand its great to see old classics revived, but it's difficult to recommend when the cost is unjustifiably high!

# INCOOMING

It's official, Apple will be holding an iPad focused event on the 7<sup>th</sup> May, with WWDC just a month later in June. Bloomberg's Mark Gurman has stated he is expecting there to be an announcement of a long awaited and rumoured iPad Pro with OLED display. It's worth bearing in mind the last iPad Pro refresh was in October 2022.

An OLED display for iPad would be a great addition. iPad displays have always been excellent quality, but improving the black levels and colours via OLED technology would be the icing on the cake, pushing the vivid colours Apple's iPad displays are known for to new levels. Of course, Apple have used OLED in iPhones for many years now, but its failed to materialise on iPad. Hopefully, this changes with this upcoming event. The latest generation of iPad Pro uses a miniLED display which was an improvement on the previous

display, but still suffers from haloing around objects, something that just does not happen with OLED.

It is also expected that we will see Apple's M3 chip making an appearance. This would not be too surprising given the current generation is on Apple's M2 chip. The graphic for the event also highlights the Apple Pencil so perhaps there is a new Pencil on the horizon too.

Will we also see the rest of the iPad line refreshed? It would be nice to see the entire lineup get a make over. iPad Mini is still on the A15 Bionic. The iPad Air is on an M1 with the 9<sup>th</sup> Gen iPad on A13 Bionic, and the 10<sup>th</sup> Gen iPad is on A14 Bionic. These are aging chips now. Honestly, the range is currently a bit all over the place and the range could do with a bit of a slim down, but Tim Cook's Apple has never been one to be quick on removing older product lines!

