



1949

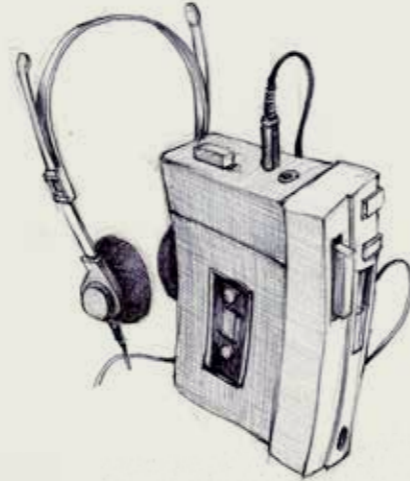
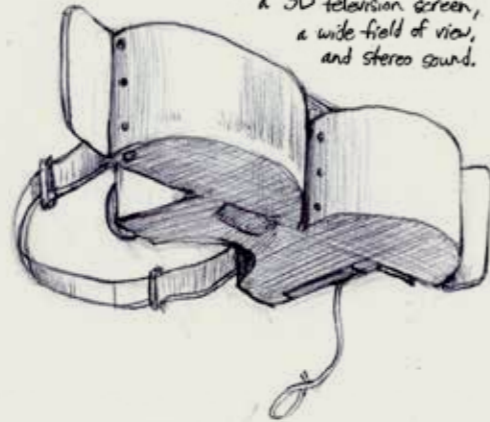
### Man-from-Mars Radio Hat

Strange as it appears, this hat with built-in battery-powered AM radio was the first example of mass-marketed wearable technology, making it a key creative and scientific breakthrough. But with its radio aerial, vacuum tubes and tuning dial located on the outside, it didn't win any awards for aesthetics.

1960

### Telesphere Mask

The first ever head-mounted display offering an augmented reality experience, the Telesphere Mask, was patented in 1960 by Morton Heilig, who is known as the father of virtual reality. Billed as a "stereoscopic television apparatus for individual use," the mask comprised a 3D television screen, a wide field of view, and stereo sound.



1979

### Sony Walkman

It wasn't the world's first portable stereo, but it was the one that caught public imagination. Launched in Japan in July 1979, and then in the US and the UK a year later, as an affordable alternative to existing portable cassette players. Listening to music on the go became easier for millions worldwide.

Devices that are progressive and fashionable herald the advent of the science fiction era. A look at the evolution of portable and wearable gadgets reveals that we're nearing the event horizon of virtual reality.

TEXT Joseph Reaney

1983

### Casio Databank CD-40

Calculator watches first appeared in the mid-1970s, but it was the Casio Databank that turned them into the must-have '80s accessory. On top of offering calculator functions, this watch could store and recall data up to 16 characters in length - so users could input names, addresses, phone numbers and even appointments.

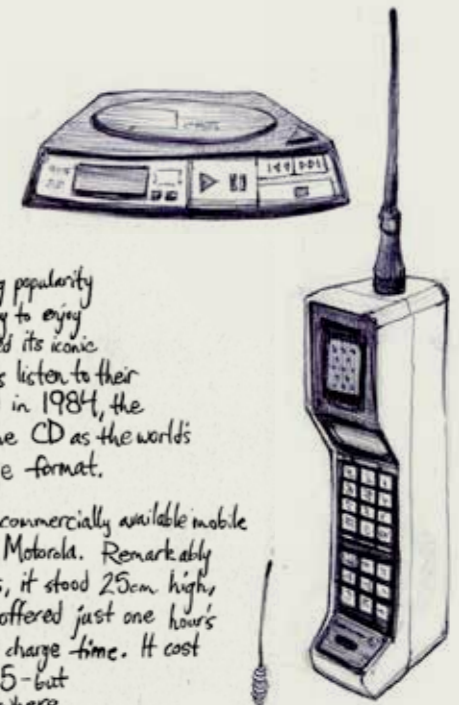


1984

### Sony Discman and Motorola DynaTAC 8000X

Recognising the gradually growing popularity of compact discs (CDs) as a way to enjoy music at home, Sony leveraged its iconic Walkman to help music lovers listen to their discs on-the-move. Launched in 1984, the Discman helped establish the CD as the world's most popular music storage format.

In the same year, the first commercially available mobile phone was also unveiled by Motorola. Remarkably different from today's models, it stood 25cm high, weighed 28oz (790g), and offered just one hour's talk time on over 10 hours of charge time. It cost a small fortune - US\$3,995 - but without it, we wouldn't be where we are today.



1994

### Wearable Wireless Webcam

Long before Google Glass and smartphone cameras, there was the Wearable Wireless Webcam. It allowed its creator Steve Mann to record video while away from the computer, then upload it later. Mann is considered a pioneer of "lifelogging," in which first-person video is used to record parts of a person's life.



# BACK TO THE FUTURE



**2001**  
Apple iPod

On October 23 2001, Apple unveiled their first generation iPod, a digital music player that would change music consumption forever. The original iPod had a five-GB hard drive and a two-inch monochrome display. Further innovations followed, like video capability (2005), touchscreens (2007) and voice control (2009).



**2003**  
Garmin Forerunner

The first of Garmin's groundbreaking series of GPS watches was released in 2003. It was revolutionary as it was designed to aid joggers by measuring metrics such as distance, speed, incline, training time and calories burned. It would alert the user if they were going too fast or too slow, and would automatically pause the lap time when the users slowed to a walk. Later models also measured stride pattern, heart rate and estimated oxygen consumption.



**2007**  
Apple iPhone

One of the most anticipated launches in tech history, the introduction of Apple's game-changing smartphone, happened in January 2007. The first-generation iPhone featured a trailblazing multi-touch touchscreen with "soft" keyboard, visual voicemail, a two-megapixel camera, an advanced web browser, and for the very first time, an opportunity to add applications direct from Apple's App Store.



**2014**  
Google Glass

Developed by Google with the aim of realizing "ubiquitous computing" (wherein computers are accessible 24/7, without requiring one to lift a finger), Google Glass features an optical head-mounted display that allows users to surf the internet, take photos and videos, and experience augmented reality by voice command. It has also catapulted wearable gadgets into high-fashion territory.

**2012**  
Sony SmartWatch

This elegantly-designed wristwatch served as a second screen for the Sony Xperia smartphone—the first big player in the smartwatch market. The newest model works with all android phones. But all eyes are on Apple, who look likely to take smartwatches to new heights with their upcoming iWatch release.



Coming soon:  
Oculus Rift

Starting with a successful Kickstarter campaign for its development in 2012, the Oculus Rift virtual reality headset was bought by Facebook earlier this year, and its consumer version is due to ship in the near future. The kit promises 960x1,080 pixels per eye with a 100-degree field of view, making it the future of augmented reality.

