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4K TV TIME TO UPGRADE

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INSIDE!

Kindle Oasis:
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ULTRAHD™
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DOLBY
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Model shown E6

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lg.com/uk/discoveredoled



LG EG960V
JUNE 2015



LG EG960V
MAY 2015



LG EG960V
JUNE 2015



LG EC970V

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TOP 10
OF
EVERYTHING

Looking to buy something but need a bit of advice? Turn to our *Stuff* Top Tens: our expert listings of all gadgetry, from p113.



The *Stuff* Top Tens are now shoppable on your phone! Find out how on p114.



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WELCOME



Ever since we laid eyes on Samsung's first ever 4K TV at CES 2009, we've been in love with the idea of owning an ultra-high-definition screen. There's been just one problem: the lack of 4K content.

Thankfully, the steady trickle has suddenly turned into a downpour. Netflix and Amazon now stream most of their flagship shows in 4K, Sky and Virgin have released or announced 4K-capable boxes, and there are new versions of the PlayStation 4 and Xbox One supposedly on the way that will support 4K games. All of this means that it's time to call it: your next TV *has* to be 4K.

The magazine you're holding has everything you need to say goodbye to HD and hello to UHD. Whatever your budget, we've found the TV for you, from a £700 bargain to a £3000 OLED stunner and everything in between. Find out which one you should buy, and what you should watch on it, from page 61.

Another piece of technology that's now finally worth buying is the electric car, as we found when we took six of the best across London for a week. Major players like VW, Nissan and Kia have been quietly making affordable electric cars that are available right now, well ahead of Tesla's promised \$35,000 Model 3. If you want to know which one is worth installing an electric charger in your garage for, we have the answer from page 38.

Guy Cocker, Global Editor-in-Chief / guy.cocker@stuff.tv / [@guycocker](https://twitter.com/guycocker)



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Stuff is also available for iPad or iPhone – download it from the App Store, or see p100 for this month's subscription offer.

Android fan? Stuff is also available on **Google Play**, **Zinio** and **Exact Editions**.

WANT TO TRY REVIEWING STUFF?

Fancy telling Apple how to improve its next iPhone? We're putting together a panel of tech experts, and you could be on it: find out more at techpanel.co.uk

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I WENT TO THE MOON

It's funny how growing up after the first Moon landing makes it all feel so mundane.

Weirdly, it was last year's *The Race For Space* album by Public Service Broadcasting that brought home the mind-blowing brilliance of the achievement to me, and the Apollo 11 Virtual Reality Experience is similarly eye-opening. Over an hour I saw every stage of the mission, much of it from the eyes of the astronauts; and while some parts are pretty amateurish, that doesn't diminish the impact. Thoroughly edutaining stuff.

Tom Parsons, Deputy Editor, stuff.tv



I ELECTROCUTED MYSELF FOR BISCUITS

Or rather, I punished myself for even thinking about

them, by electrocuting myself with a rather devilish wearable called Pavlok. Every time you're tempted by biscuits/cigarettes/paying for *Candy Crush* lives, just tap the button and your wrist gets well and truly zapped. The trouble is, I just took it off after a while. There's nothing stopping you from giving up, so it requires some willpower for it to work. It does make for a great (albeit terrifying) alarm clock, though.

Esat Dedezade, Deputy Features Editor



OUR MONTH

Space, axes and electric shocks: how we spent May



I TRIED ON A £72K WEARABLE

A smart wristband that puts the Apple Watch Edition to shame when

it comes to splashing the cash? I was pretty nonplussed. Wait, though: it comes bundled with a £72,000 Jaguar SUV? That I *do* want to see. The F-Pace Activity Key disables your car keys and keeps your motor safe while you're out doing the things that SUV owners do... although I don't understand why you would bother going skiing if you could just drive your 4x4 Jag straight up and down the slopes.

Tom Morgan, News Editor, stuff.tv



I TOOK THE V OUT OF VR...

...by getting the *Stuff* team to engage in some real physical activity – namely,

throwing axes at wooden targets at Whistle Punks in East London. It was a risky proposition. Hand-eye coordination certainly wasn't in question among such a group of gaming geeks; it was whether those reflexes could be brought to bear upon the larger muscle groups without causing a Fatal Error. As it turned out, possibly helped by the medicinal application of beer, no-one was even slightly harmed.

Fraser Macdonald, Consulting Editor



H

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HOT
FOUR
#1

NO-ONE LIKES SHOUTY WRISTS

Garmin Vivomove

In this world of 24-hour Technicolor tittle and tat, subtlety is to be applauded, or even actively encouraged. Garmin's latest fitness tracker is the very picture of restraint, quietly measuring your steps and displaying that information as a dynamic daily goal percentage bar. It also has an inactivity bar that slowly fills up with red if you don't move about. But that's it: Vivomove won't vibrate or beep or scream at you. If you do want a little visual reward for your efforts, you can Bluetooth your steps and sleep stats over to Garmin's Connect app, there to compare your totals over time on its colourful graphs. But the Vivomove itself will just keep on with its dignified daily summing up, for the entirety of its one-year battery life.

As hot as... **passing unnoticed, like a ninja**
£140 (Sport), £180 (Classic),
£240 (Premium) / garmin.com

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F

21 PAGES
OF THE BIGGEST
STORIES FROM
PLANET TECH



Class divide

There are three styles: the Sport (pictured) has a black or white case, the Classic is black or rose gold with a leather strap, and the silver or gold Premium has a stainless steel case.



SLIGHTLY
LESS
SUBTLE

iFit Duo

The Duo has a physically flippable face: all analogue chi-chi on one side, all fitness-stats-displaying monochrome LCD on the other.

from £299 / proformfitness.co.uk



VERY
LESS
SUBTLE

Garmin FR735XT

GPS, colour screen, multisport recording, optical heart-rate monitor and Strava Suffer Score make this the antithesis of the Vivomove.

from £359 / garmin.com



It's a long way to pukka hairy

The Supersonic and its magnetically attaching nozzles were tested in a £50m R&D process, says Dyson, using over 1000 miles of real human hair. Gak.



NOT JUST A LOT OF HOT HAIR? DYSON SUPERSONIC

Time to pick a lane, gadget fans. Head down that way if you want to suggest that Dyson's targets – vacuum cleaners, hand dryers and now hairdryers – are mechanically simple devices that are easily upsold using buzz phrases and bright plastic. Alternatively, bear left if you think Dyson's magic lies in bringing innovation to otherwise boring domestic products. Or – third option – join us at the intersection. We have deckchairs and drinks, and we're throwing Supersonic facts at oncomers and taking bets on which way they'll go. Facts such as that its motor is in the handle for balance, or that its thermostat measures the exhaust temperature 20 times a second to protect your hair. Or that it costs £300 – ha! Did you see that one swerve? **As hot as... 100 degrees, but never more £300 / dyson.co.uk**

HOT
FOUR
#3

WATER WAY TO DIFFERENTIATE ACER SWITCH ALPHA 12

Five years ago, something amazing happened called the Alienware M11x, and we thought the future of computing was shifting away from the slim-and-light prophecies of the MacBook Air and towards small but awesome laptops with red glowing keyboards and steam coming out of the vents. Sadly, it failed to change history and we're festooned with MacBook Airs and Microsoft Surfaces and the like – none of which have any chutzpah. But the new Acer kickstand hybrid is a beacon of hope – beneath its silver casing it's got badass liquid cooling for its proper i3, i5 or i7 processors. We've been told, though: no steam.

As hot as... being less hot
from €700 / acer.co.uk

ALSO ACE THIS MONTH...

Acer Liquid Zest Plus

Battery life is your phone's greatest daily performance indicator. Acer's taken the problem head-on by mating efficient specs with a HUGE 5000mAh battery. **£1ba**



Acer Chromebook 14 for Work

Don't be put off by the 'for Work' bit – it means it's got a Gorilla Glass screen and has been spill-proofed and drop-tested. More suitable for Life than Work, really. **from €250**



Acer Predator Z1

Among some 'proper' gaming rigs (ie: with lights and vents), Acer unveiled these curved monitors. Fast response times and rich colour reproduction are promised. **from €600**



HOT
FOUR
#4TECHNOLOGY
VERSUS
TECHNIQUE
PICTARDo do
things by halves

The 'proper' shutter button lets you half-press to lock the exposure and focus, then re-frame your shot as you see fit. Lock, move, frame, shoot. Do a roly-poly. Repeat.

Mastering photography technique can unlock images that look better than the camera you took them with. But technique takes time. Technology is, as ever, ready to give the impression of technique in return for cash. The Pictar camera case works with any non-Plus iPhone and adds a two-step shutter button plus physical zoom and exposure controls, and a selfie button. Coupled with its inherent hand-holding stability, your shots can only look better. (If not, buy yet more 'technique' and use the tripod mount or LED light cold shoe.) More clever yet, Pictar doesn't use battery-intensive Bluetooth or Wi-Fi—it emits high-frequency sounds that the Pictar app 'hears' and acts upon.

As hot as... channelling your inner Leibovitz
from US\$60 / mymiggo.com

ALTERNATIVELY...



Bitplay Snap! Pro
A classy grip case with choice of hand-holds. The shutter button is physical, not wireless—it prods the iPhone's volume button, which many camera apps will accept as a shoot command.
from US\$60 / snap.bitplayinc.com



Olloclip Studio
A multitasking case and accessories system that comes with a kickstand, two-finger grip and screw-holes for tripod mounting. This is designed to work with Olloclip's popular add-on camera lenses.
£80 / olloclip.com





#XploreNature

L'EAU D'ISSEY
POUR HOMME

ISSEY MIYAKE

**ISSEY MIYAKE
L'EAU D'ISSEY
POUR HOMME**

TAKE IT LIKE A POLAROID PICTURE

Impossible Project I-1

£230 / impossible-project.com



Nothing says 'I was born in the wrong era' like a Polaroid camera. But this one is not all analogue...

● **This is a first**

As in, it's the first Polaroid-style 'instant' format camera to be launched in over 20 years. There are plenty of existing Polaroid cameras still in the world, all of which owe their continuing functionality to the Impossible Project, which rescued the original manufacturing machines from a Dutch crusher and began marketing the film cartridges to enthusiasts. But now, Impossible is realising its dream by releasing an entirely new camera.

● **Analogue... and yet digital**

The basic shape of the I-1 will be familiar to anyone who has ever seen an old Polaroid camera, even if the matt black finish and lens-surrounding LED ring flash are bang up to date. You can press the shutter button and get an instant print-out – you can even wave it about to try and make it process faster, if you like. But the camera also connects to an iPhone app via Bluetooth. Using the app you can remotely trigger a shot, but more interestingly you can also muck about with shutter speed, aperture and flash settings. Even double exposures.

● **What price reminiscence?**

The I-1 costs a not unreasonable £230. But, as with Polaroid cameras of yore, it's the film that quickly adds up. Impossible sells both colour and black-and-white film for the I-1, at £14.99 for eight shots. That marks this as one for committed instant picture fans and quirky gadget collectors.

The intensity of the LEDs in the ring flash can be adjusted. Moody shadow shot? Click. Aah! Screaming rabbit in headlights? Click. Argh!





ALTERNATIVELY...

The Impossible Project still sells these vintage mug-grabbers

● Polaroid Spectra £140

The flatter shape of the Spectra outputs a wider film than the classic square Polaroid picture. It also has exposure control, a self-timer and an early sonar-powered autofocus system.

● Polaroid 600 £150

Ask most people over 30 to draw a Polaroid camera and they'll refuse, saying they have more important things to do. But a couple – the childless ones, most likely – will draw this.

AS WITH
POLAROID
CAMERAS OF
YORE, THE FILM
PRICE QUICKLY
ADDS UP



Orange means no, kids

LEGO PORSCHE 911 GT3 RS

Children know the score. They recognise that any Lego set is definitely for them to play with... but only after their parents have built it. Only after, in fact, Mum and Dad have booked a babysitter so that they can take the Lego Death Star/Hogwarts/Batmobile into the spare room with two bottles of wine and a bowl of Haribo and have themselves a time. But now the pretence can end. This latest high-end Technic set comes in exclusively adult packaging, with a chunky manual that's as much a history of Porsche as it is instructions for building.

The car itself has manufacturer-approved yellow brake calipers, red dampers and even an intricately engineered paddle gearshift.

It is, comprehensively, not for kids.

£250 / shop.lego.com



EE, buy some

EE JAY

Since 2010 you've been grafting, striving and saving, desperate to be one of those deliciously decadent people who hand out Apple iPads as free portfolios. Bad news: you're never going to be that well off. Good news: EE's newest Android tablet is just £120 with a pay-as-you-go 4G SIM. You could probably afford to send one out to all your prospective clients! Well, the important ones. OK, the top three. They'll love the little Android iPad-alike, with its 8in screen, 1GHz processor and 1GB of RAM.

It only has 16GB of storage (and up to 32GB microSD) but, if we're honest, your portfolio isn't that expansive.

£120 / ee.co.uk



—
 IN ITS 'LIVE' MODE,
 THE MODEL TAKES
 OVER 29 AND A
 HALF DAYS TO
 FULLY ROTATE

MOON

£450 / moonproject.space

Uh-oh, get out your *The Sky At Night* badge.

Fine words from someone who spends so much free time staring gormlessly at the fantasy worlds of *Game Of Thrones*. You could at least be contemplating the very real, super-fantastical landscapes of our own planet and its solar system. And anyway, how nice to finally be able to silence those cries that you want the Moon on a stick. "I already have the Moon on a stick," you can reply,

"so how about you get on with what I want from you?" Zing!

You will surely never wield that much power.

Nor do I want it. All I need is enough reward for my humble activities to be able to afford neat Kickstarter projects like this one. It's a lunar lightshow: a moon-phase diorama that sits in the corner of your living room quietly telling a very big story about the fundamental forces of life on Earth.

Really? Because it looks like a plastic ball lit by some LEDs

You beast. The designers availed themselves of the latest Moon mapping from NASA and the Institute of Planetary Research in Germany. They painstakingly created a topographically accurate 1/20million-scale 3D model and researched the best materials and 3D printing techniques. The motor and brain were custom-designed, and that light accurately illuminates the model in real time.

Wait, you're saying that it takes... um...

If you'd spent less time watching *GoT* dwarves in bikinis and more time paying attention to science... but yes, in its 'live' mode, the model takes over 29 and a half days to fully rotate. You can manually adjust the light source or force it to do a demo rotation in just a few seconds. Needless to say, but say it we will, this classy spaceball project was many times funded at time of writing.



Spec it, flex it, fix it BASTION CYCLES

Pretty bike, huh? But that's not the half of it. Bastion has a unique 3D printing process that means buyers can fine-tune the frame's flex. Ribs on the inside of the titanium parts can be customised to suit sprinters who like a stiff bike, or old-timers who prefer a little give. We've seen 3D-printed bike bits before, but we've never seen such freedom to muck around with the structure of your bike. Note: Bastion will step in if your design gets too clownish. And your custom bits can be reprinted if you break them. Fix it, don't ditch it – that's smart.

tba/bastion-cycles.com



Don't not use your phone just to use your phone GARMIN DRIVEASSIST

Yeah, you can use your smartphone as a sat-nav. Just like you can use your cat as a coffee cup. It's just not ideal. Not only does Garmin's new Drive range bring all the advantages of a dedicated in-car sat-nav, but this camera-equipped DriveAssist model also adds some fancy-pants functions you only normally see on high-end cars. Like lane departure and forward collision warnings, and also a traffic jam feature called 'Go' that warns you that cars ahead have started moving again. Because, perhaps, you were illegally distracted by the phone we just convinced you to take off the windscreen. Tsk.

from £280 / garmin.com



? WTF IS HOVR?

Those are some low-tech scales.

What? Oh, you mean the SORTR? Here's what happens: all across the land, people are engaged in arguments. Cat versus dog, cake versus biscuit, yesterday versus tomorrow – the kind of discussion that bounces endlessly around saloons and salons and *salles de bains*. Resolution is rarely reached. Until now. An IFTTT routine on your smartphone picks up on heated debate and automatically alerts the SORTR service. Moments later, a greased oik on an electric scooter turns up with this, which balances out the argument... in real time!

So the heavier thing wins, then.

Ha! Does it now, Sir Isaac? You've fallen into the causation-versus-correlation trap! Just like that shirt, you're inventing a trend where no trend exists. Anyway, the results can be unexpected. The cat often out-psyches the dog before it's got a paw on the platter, thus earning itself the win. Cake, likewise. And, anyway...

Look, it's not even called SORTR. The name's at the top there: HOVR.

Alright, misery guts. Back to reality we go. So, the HOVR (US\$79, hovr.pro) is a Kickstarted sub-desk wobbler. Either suspended under your work desk, or hanging free on its stand, it promotes unconscious movement of the legs. It's like a desk treadmill, without all the noise and pomposity, that burns calories and improves circulation. More importantly, like a child swinging its legs on a too-high chair, it encourages a flow of mirth around your body, lighting the dull lamps of your youth that just might lead to you dusting off your surfboard and heading out for a long weekend in Bude.

I don't have a surfboard.

My, how you've fallen from the aspirations of your youth. Or, someone's youth. But there's a more immediate problem with HOVR: the repetitive movement that it promotes is exactly the kind of thing that blows people's fuses in offices. You know, like the coughing guy. Or the lady with the annoyingly loud mouse wheel. Just keep it greased, that's all we're saying.



HOTH RACER

We wouldn't blame you if you were to immediately rip out this page, lie down on the floor with some crayons and draw some AT-AT walkers in the background. (The newsagent might be miffed, though, so maybe buy the mag first?) But you're right, this does look like it might be a vehicle from the next *Star Wars* film, *Rogue One*. It isn't. The Snoped is a one-off design study by Joey Ruiten, engineer of the outlandish. Inspired by the 'cafe racer' style of motorcycles, it has a 90cc engine powering a single snowmobile-esque track. It looks as if it would be extremely difficult to ride in the snow, but then it also looks awesome, which is the idea.





NEWS FEED



LEAF IT AT HOME

Nissan is launching a home power storage system, xStorage, similar to Tesla's Powerwall. Ex-Nissan Leaf batteries will enjoy a second life attached to your garage wall, drawing power from the mains or from domestic solar or wind turbines. The 4kW device will cost about £4000 from October.



UP PERISCOPE!

Live video streaming app Periscope has announced the ability to hot-swap between your phone camera and a drone camera. Along with new footage search skills and the option to keep your broadcasts, Periscope is taking the fight to rival service Facebook Live.



NINTENDO DATED

March 2017 is the date dancing on the lips and minds of Nintendo fans, for that is when the new NX console is slated to appear. Meanwhile, an explosion of 'Level Up' beeps from chip maker Macronix has led analysts to suggest the NX might return to the use of game cartridges, not discs.

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away the wires
but kept the
sound quality.



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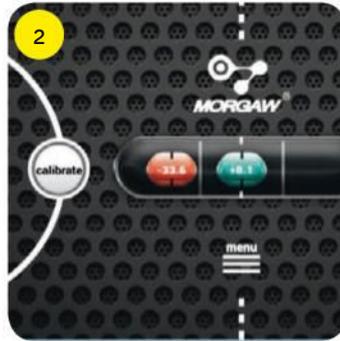
This month's mobile must-downloads



1 Airbnb

£free / iOS, Android

Rather than just a daunting spread of location-based results for your trip, Airbnb now lets you choose a neighbourhood type to filter by. Also, property owners can submit local guides. They'd know, right?



2 Morgaw Saddle Adjust

£0.84 / iOS, Android

Suspect that your saddle detaches itself from your bike at night and goes clubbing? For better or worse, this saddle-position recorder app will give you the gyroscope-based evidence you've been craving.



3 Microsoft Word Flow

£free / iOS

US text-entry fans are excited about this latest Microsoft Garage project. It's an iOS port of the Windows 10 Mobile keyboard with its natty one-handed mode. Fingers crossed for a UK version.



4 Cuvva

£free / iOS

People don't want to speak to their insurance company. Not even after an accident, most times. So this call-centre-avoiding instant temporary insurance app, despite its high excesses, seems like a win.



5 Warbits

£2.99 / iOS

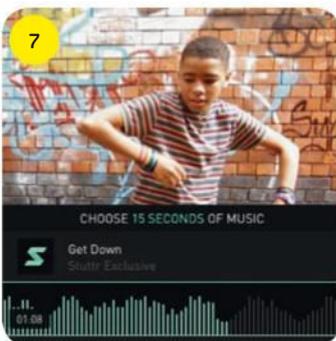
You might dismiss this as a clone of *Advance Wars*. But only a chump would do so, because you'd miss out on the broad scope, the humour and the polished production of this premium strategy app.



6 Now Escape

£free / iOS, Android

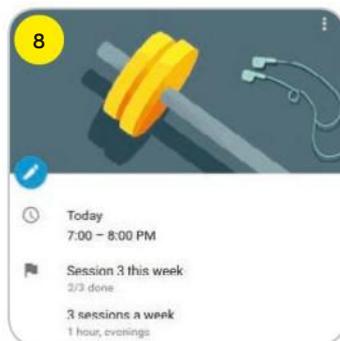
Coupled with a double espresso, this frenetic neon vertical scroller could see you arrive at work in no fit state to do anything. Maybe side-load some Kenny G through your ears as an emotion-stabiliser.



7 Stutttr

£free / iOS

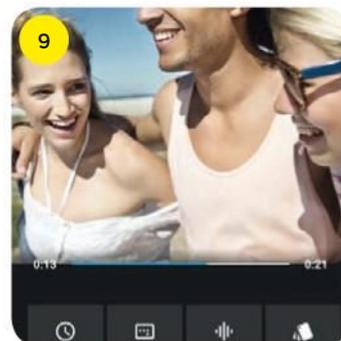
St-St-Stutttr app. Nostalgia hit for the older gadgeteer there, but this isn't about terrible '80s rap parodies. It's a utility for boshing a wee A-B loop into your video for artistic or beat-matching effect. Innit.



8 Google Calendar

£free / iOS, Android

The brain has a wonderful ability to unsee common things, like that 'Go For A Run' entry in your calendar. Gcal's new Goals feature smartly schedules, tallies and badgers that wandering mind of yours.



9 Quik/Splice

£free / iOS, Android

Two video editing apps, Quik and Splice, are now re-released under the umbrella title GoPro Mobile Editing Suite. The super-sweet news? They're now both free, and don't only work on GoPro videos.



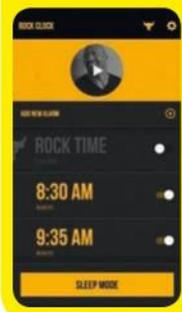
IN THE SPOTLIGHT

The Rock Clock
£free / iOS, Android

If there's one thing the 21st century lacks, that thing is not alarm clock diversity.

There are robot alarm clocks that will run away from your snooze-hunting hand, and alarm clock apps that won't shut up until you finish a brain-engaging puzzle. And now, The Rock Clock. Wrestler turned actor Dwayne 'The Rock' Johnson's alarm clock app has Rock-recorded alarm sounds and video messages to watch on awakening.

There is no snooze button, because snoozing isn't an activity that The Rock wants to encourage. And, if you're a true fan, you can simul-wake with the big guy, using the 'Rock Time' setting. It is, fortunately, adjusted for timezone.



SUNGLASSES

Avert your eyes from the blinding brilliance of these techy bins

1 Dragon EnduroX

Dragons like vented lenses, because they get quite hot. And easily swappable lenses too, because of all that 'flying into your own flames' bother.

£125 / dragonalliance.com

2 Serengeti Panarea 24hr Le Mans

We don't suggest buying new sunglasses for every race, but this being the month of Le Mans, you could do much worse than these 555nm specials.

£197 / serengeti-eyewear.com

3 Adidas Evil Eye Evo Pro Vario

Huge wraparound lenses with clear-to-grey photochromic tech make these perfect for fast forest cycling. Or miniature pony point-to-point.

£190 / adidas.com

4 Oakley Latch

When you drop your expensive sunnies there's always some cackling brat watching. Oakley pre-empt the problem with a built-in pocket clamping latch.

£110 / oakley.com

5 Bolle Bolt Competivision

Wimbledon begins this month, and these yellow-enhancing lenses will give you excellent tennis-ball-spotting skills. As a bonus, you'll never overlook a banana.

£120 / bolle-europe.co.uk

6 Nike Vaporwing Elite

Yikes, that's a lot of money. But the solid gold lenses will block 100% of UV rays! (No, they're not really made of gold; they're actually exceedingly light.)

£317 / nikevision.com





Wireless

AUDIO-TECHNICA AT-LP60

Vinyl sales are up again, but a recent survey suggested people are not playing the records, just buying them for the joy of it. Many don't even have a record player. It may be that they're put off by audio geek-speak such as 'phono stage' and 'line level output'. This Audio-Technica deck neatly circumvents all the connection confusion by both amplifying and wirelessly streaming your shiny records to any Bluetooth speaker. Easy.

£170 / urbanoutfitters.com



Timeless

FLUANICE RT81

Canadian audio brand Fluanice just punted itself into our Euro-type insouciance by Kickstartering two affordable record players. They don't have the Bluetooth convenience of the Audio-Technica, but they do also have a built-in amplifier so you can plug them straight into any desktop speaker that has an aux-in socket. Or, a nice pair of powered speakers such as the Q Acoustics BT3 or Dali Zensor 1AX. Either way, the slightly pricier RT81 has this wonderfully classic walnut finish, and is therefore our favourite.

£175 / fluanice.com



📄 DROP EVERYTHING & DOWNLOAD

Inks £1.49 / iOS

Yeah, you got us: we love nothing better than a minimalist, art-led game. And, by Odin's beard, we just love pinball! But *Inks* is produced by State Of Play, which made the incredible *Lumino City*, a game that was literally crafted out of paper before being filmed and animated... and in which there was a tiny paper-crafted pinball game, which inspired this one. So yes, partly this looks like an ace bit of pinball, where hitting the bumpers dislodges splodges of hyper-coloured ink that the ball trails around the table, creating a sort of interactive psychedelic art installation. But mainly, we feel like State Of Play has already earned this download on the back of the startlingly wonderful *Lumino City*. See what you think.



START MENU

The latest startups, crowdfunded projects and plain crazy ideas

KICK-STARTER

Young geeks are the new movers and shakers

TECHNOLOGY WILL SAVE US MOVER KIT

Coding kits for kids are ace, but you don't want your little ones sitting around in front of the PC. You want them lolloping about outside, bioconverting Findus Crispy Pancakes into an all-night sleep. King of kits Technology Will Save Us gets you. Its latest project is this snap-together wearable for kids. The Mover has LED lights, sensors and a brain, all of which can be activated in various ways using the PC-based *Make* program, while your little Poindexter can make his or her own apps from scratch.

from US\$45 / techwillsaveus.com



BACK IT

STACK IT

SACK IT

KICK-STARTER

INDIE-GOGO

KICK-STARTER

INDIE-GOGO



Torqueing about a revolution

GEOORBITAL WHEEL

It's the dream of every cyclist slogging into a headwind: just pop out the front wheel and install this self-contained 500W, 20mph motor kit. What's the catch? Its cost, its weight and its likely illegality in the EU. But reality notwithstanding: wheeeee! etc.

from US\$950 / geoo.com



Tiny tunes TV NATIV VITA

Spotify is getting into video but you're like 'whatever' because you've already smashed down a pledge for this high-end, hi-res wireless music system. As well as terabytes of storage and compatibility with Spotify, Apple and Tidal, it has an 11.6in, 1080p touchscreen. And you stumped for the matching DAC and power supply. You legend.

from US\$1100 / nativsound.com



Take two bottles into the ocean?

AIRBUDDY

A second campaign this month that promises to make dreams come true – this time for divers. The AirBuddy is an update of the pre-scuba concept of pumping air from the surface to your face. A battery-powered compressor floats along above you, while you drift about for up to 45 minutes.

from AU\$1300 / airbuddy.net



Invincible cable

ZUS KEVLAR CHARGING CABLE

Few things generate such anger and mistrust as phone-charging cables – we bawl that they've stopped working then moan they're too pricey. Well, here's a guaranteed-for-life, kevlar-reinforced high-speed charging cable that won't cost the earth. It's already over 500% funded.

from US\$15 / nonda.co

The ergonomic sleeves guarantee happy arms, with a thumb loop for, well, thumbs.



It breathes!

SALEWA PEDROC ALPHA

Down jackets are marvellously light and packable. But given half a chance the feathers will either bunch up into one corner or escape back into the wild. Squawk indeed. This Salewa jacket is the first to use the freshly hatched Polartec Alpha synthetic insulation – just as light, warm and packable as down, but it won't escape. Which also means that it can be put behind a more open, breathable top layer fabric, so you can wear it for both slow and fast activity. Or just wear it as loungewear, whatever.

£150 / salewa.co.uk

WTF? Trimmer, edger and shaver in one



Read quickly, before we change our minds

PHILIPS ONEBLADE

Rumour has it there are more widgety-fangled grooming gadgets on planet Earth than there are human beard hairs. So we tend not to feature them in *Stuff*. Abundance breeds disgust, as they say. This one, however, has made it across the interest threshold. Partly because of its visual and (apparent) engineering simplicity. Otherpartly for not demanding a three-figure sum for its alleged abilities. But mostly because, according to our in-house, scrungy-turned-sharp-faced tester, the OneBlade works really well at trimming, edging and shaving. So there you have it. An anomaly in our anti-grooming stance.

£35 / philips.co.uk/oneblade

FUTURE STUFF ATMOS CLUB NIGHTS

Esat Dedezade samples the sound system that'll get us back in da club



I don't go to clubs much these days. But when I do, I'll usually head for Ministry of Sound because it's always had a kick-ass sound system.

So when I heard it'd been upgraded with a new Dolby Atmos system and DJ Sub Focus was there to demo it, I grabbed my fluo vest and headed down there in a state of some excitement.

Atmos is a name movie buffs might be familiar with, perhaps having made a pilgrimage to one of the cinemas equipped with the new sound tech. It's able to handle 128 separate audio tracks via up to 64 speakers, thus creating sound 'objects' that whizz about the room with uncanny realism. You can get it at home too, though perhaps with fewer than 64 speakers.

Ministry's Atmos upgrade, a world first for a club, sees its main room bumped up from 40 to 60 speakers, interspersed in the rafters like hidden audio ninjas waiting to pounce on your unsuspecting eardrums.

Some work is required to take full advantage of the new system – to create his set for the Atmos demo, Sub Focus had to repeatedly schlep back and forth to Dolby's studios.

Was it worth the effort? Yes. Yes, it was. 'Sensory overload' is an apt phrase. The regular heart-thumping bass was present, but occasionally 'bounced' from one side of the room to the other. Above us we could hear certain elements or vocal lines hovering, or being flung around the room.

Any fears of it all being a gimmick were gone within the first ten seconds. If all sets were produced to the same standard (which would be asking a lot) I could see myself becoming a regular clubber again.

DUE
NOV 4

FIRST LOOK CALL OF DUTY: INFINITE WARFARE PS4, Xbox One, PC

Call Of Duty: Infinite Warfare is shaping up to boldly go where no *COD* game has gone before: outer space.

With Earth stripped of its natural resources and reliant on off-world colonies for survival, it's going to be a bad day in the office when the Settlement Defense Front decides to send bombs and bullets instead of the usual care packages.

Leading the fight back, you'll be in control of Tier One Special Operations pilot Captain Reyes, with combat shifting from ground to space with "few

visible loading times" – though you shouldn't expect *No Man's Sky* levels of exploration.

Naturally, *Call Of Duty's* competitive multiplayer mode will be making a return too; but with *Destiny*, *The Division* and upcoming mech stomp-a-thon *Titanfall 2* to compete with, *COD* is sure to add a sci-fi twist – simple boots-on-the-ground gunplay won't cut it in that company. Zombies mode will also put in an appearance.

Space might seem like a world away (literally) from what made older *COD* games great, but

there's good news for long-time fans and frag-happy hipsters, as the pricier Legacy and Digital Deluxe versions of *Infinite Warfare* will be bundled with a remastered version of 2007's original *Modern Warfare*.

And it will be worth it. Raven Software is rebuilding levels from scratch with graphics worthy of a 2016 game. Expect updated lighting and weather effects, high-res textures, HDR and spruced-up sound.

But remember: in space, no-one can hear you call someone's mum a *****.



TOUGH MUDDER



BATTLEFIELD 1 PS4, Xbox One, PC

While *COD* blasts off into space, EA thinks the future of first-person military shooters is in the past, so *Battlefield 1* takes things further back than either series has ever been before: World War I.

"How much gameplay can you get from a trench?" is what you're probably thinking, but the game's reveal trailer showed off more than just mud and bolt-action rifles. From flying bi-planes and wielding swords on horseback to controlling battleships

and piloting tanks, *Battlefield 1* will have plenty of ways to obliterate your foes.

It also suggests a real globetrotting campaign of death, with Arabian deserts, quaint French villages and the mountains of Italy to blow to smithereens. Yep, the environments we've all come to love blasting to bits will be present and correct thanks to the Frostbite engine.

And while the settings might be old-fashioned, the gameplay won't

be: *Battlefield 1* includes all the trademarks of Dice's previous instalments: strategy, team-play and large-scale battles, with a huge arsenal of weapons to wield and vehicles to commandeer.

But the thing that keeps most people coming back to *Battlefield* is its massive, 64-player multiplayer skirmishes. So far, only fan-favourite *Conquest* has been confirmed... but you can expect more to be announced at E3 this month.

REMASTERFUL GAMING'S BEST REMAKES



THE LAST OF US REMASTERED PS4

Finished *Uncharted 4* already? The finest game of the PS3 generation was also a Naughty Dog production, and *The Last Of Us* remains a stone-cold stonker. With its updated graphics and the short but sweet *Left Behind* DLC included, this is essential if you missed it the first time around.



TOMB RAIDER: DEFINITIVE EDITION PS4, XBOX ONE

Ten years ago Lara Croft fell from gaming grace after a trail of mediocre sequels, but this reboot proved she could still hold her own against new ace explorer, *Uncharted's* Nathan Drake. This polished-up version of Lara's exhilarating origin story comes complete with all the multiplayer add-ons.



HALO: THE MASTER CHIEF COLLECTION XBOX ONE

Halo lost its way with *Guardians*, Master Chief's disappointing fifth outing, but this bundle of remasters makes it easy to remember the good old days. All four games (plus every bit of DLC) that led up to 5 are included, complete with not insignificant upgrades to the graphics.

INCOMING

JULY

● GHOSTBUSTERS

AUGUST

● DEUS EX: MANKIND DIVIDED

● ATTACK ON TITAN

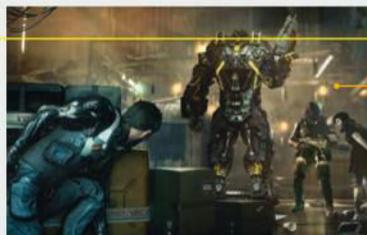
SEPTEMBER

● NBA 2K17

OCTOBER

● MAFIA 3

● GEARS OF WAR 4



LIKE A WAIT? IT'S A CAMERA WITH NO LCD SCREEN

Leica M-D

£4650 (body only) / uk.leica-camera.com

With characteristic *savoir faire*, Leica has launched a digital camera that has something missing

● No screen, no stress

In Leica's words, taking the screen off the back helps the M-D user "focus on the absolute essentials of photography". Namely: aperture, distance, sensitivity and shutter speed. And composition, obviously. There's no live view, no digital setting screens to muck around with, and no knowing whether you got the picture you actually wanted until you get home and physically swap the SD card into your PC. Even then, because the M-D only shoots in RAW, you'll have to go into your virtual darkroom and 'process' the pictures before you can think about doing something hideous like posting them on Snapchat.

● What do you get?

A selection of beautifully engineered dials to twiddle. There's a prominent ISO adjustment ring on the back, where the screen 'should' be, and a shutter speed dial up top. Aperture and focus are done on the Leica M lens that is, you probably guessed, not included. There's Leica's bang-up-to-date 24MP CMOS sensor and Maestro image processor on board, though, so presuming you get the settings right, the pics should be smashing.

● It's not all manual work

If no-one's looking, you can shove the shutter speed dial round to the red 'A', which will set the speed automatically. There's a continuous shooting mode, with which you might get away with inadequacies in your composition. And, if all else fails, there's a self-timer mode so you can just walk away from the camera altogether and leave the pictures to chance. Don't stray too far: £4650, remember.



The huge 83x optical zoom can read a wagtail's expression at half a mile away.



Live well, juice slow, die anyway SMEG SJF01 SLOW JUICER

Improbable, advertising-grade healthy people wake up and instantly swing their legs out of bed, despite having seemingly nothing better to do all day than let their inner beauty develop into a blinding magnificence. They have time to make a smoothie consisting of frozen goji berries, crushed cuttlefish and sleep crystals from a koala's eyes, and they have the time to do it slowly, admiring the nutrient-protecting slow rotation of their Smeg Slow Juicer. They then head out to the deck for some digestive yoga... only to be flattened by us attempting, and failing, to simultaneously drive, send a Slack update about being late and eat a Pop Tart.

£450 / smeguk.com



The 4K awakens SAMSUNG UBD-K8500

Given time, a dripping hose can fill a canyon. Sure enough, the yawning chasm that is the lack of 4K content for your 4K TV is gradually being filled. Now, this is only the second drop from the 4K Blu-ray player outlet, but you can't deny the physics. And it's significant, in that the UBD-K8500 is well over a hundred pounds cheaper than the first drop, the Panasonic DMP-UB900. The studios, meanwhile, have promised to crank up the flow of 4K Blu-ray titles this summer. All of this is important if, like us, you're snobbish about the quality of Netflix's 4K streams...or the ability of the UK's broadband infrastructure to host them all.

£430 / samsung.com/uk

DECIPHER ALLOW ME TO EXPLAIN...



#11 BOTS

Andrew Hayward



Essentially, bots are artificially intelligent respondents that you can hold a conversation with – but in the case of

the latest crop, most of them are not there just to amuse you. Bots are built to help you accomplish tasks – ordering food, booking airline tickets, choosing clothes – in a very natural, conversational manner.

Buying flowers was the example shown by Facebook at its recent F8 summit. Using Messenger chat you can pick a bouquet, customise the message and have it charged to your account.

That's not anything that you couldn't do on a website or app, or by calling up a real person – but bots can do some things faster, and at minimal expense to the site or service running the bot. That's a win-win situation on both ends of the transaction, and if things get too complex for the AI, a human adviser can join in with very little awkwardness.

ON SKYPE YOU'LL HAVE A BACK-AND-FORTH WITH A CARTOON CHARACTER ABOUT BUYING SHOES

Facebook wasn't the first service to offer bots, but with the recent launch of the Messenger Platform in beta – and Messenger's 900 million users – it's where we'll probably see the biggest push for bot adoption. Twitter, Slack, Kik and Telegram have all been talking up their bot game, too.

But it's Microsoft that really has our mind spinning: it claims that Skype will soon offer video bots. The idea that you'll be able to have a back-and-forth with a cartoon character about ordering a new pair of shoes is both hilarious and crazily enticing. Bring it on.

Like a rocket from the socket.

Simply plug in and enjoy excellent Wi-Fi coverage in any room,
from any power socket, with devolo Powerline!



The **devolo dLAN® 1200+ WiFi ac Starter Kit** enables Wi-Fi without signal loss anywhere in your home:

- Ideal for HD streaming and higher broadband speeds
- Plug & Play installation
- Award winning German technology
- 3-year manufacturer's warranty

www.devolo.co.uk

devolo

WIN



WIN A PHILIPS SCRENEO 2.0 HOME PROJECTOR WORTH £1499

Technology transforms everything. Once, if you found yourself sitting alone in the living room staring at a wall, that would mean you were desperately bored (assuming you're not just a big fan of walls). Now, it probably means you're enjoying a full HD home entertainment experience. Well, it does if you own a Philips Screeneo 2.0 ultra short-throw projector. And if you win this month's competition, you soon will.

Perfect for big sporting events, films and gaming, or even streaming music via Bluetooth from your smartphone or tablet, the new Screeneo 2.0 can turn a blank wall into a 1080p screen of up to 120in from just a few centimetres away. It has an integrated 26W Dolby Digital 2.1 sound system, and the carry handle means you can take it all over the house and beyond. And of course, if you really are a big fan of walls, you can always keep looking for a bit after you've switched it off.

For more information go to project-your-life.com

HOW TO ENTER

For your chance to turn every wall you see into a cinema screen, go to stuff.tv/win and answer this question:

WHICH OF THESE THINGS CAN BE PLACED JUST A FEW CENTIMETRES FROM YOUR LIVING ROOM WALL?

- A** ... A hungry leopard
- B** ... Heathrow's third runway
- C** ... An ultra short-throw home entertainment projector

HURRY!
COMPETITION
CLOSES
7 JULY
2016

Terms & conditions **1** Open to UK residents aged 18 or over. **2** Entries close 11.59pm, 7 July 2016. **3** Prizes are as stated. **4** Prizes are non-transferable. **5** Only one entry per person. For full Haymarket terms & conditions see www.stuff.tv/legal
Promoter: Haymarket, 69 London Road, Twickenham TW1 3SP



HA-2

EUROPEAN HI-FI USB DAC/HEADPHONE AMPLIFIER OF THE YEAR 2015-2016

HA-2 is a compact headphone amplifier and USB DAC featuring ESS Sabre³² Reference ES 9018-K2M DAC chip and support for 384 kHz/32-bit PCM and DSD up to 11.2MHz



“ HA-2 is the smart choice for those seeking a polished-sounding and gutsy performer that’s keenly priced. ”

“ For £250, you’ll struggle to find better detail or dynamics from a headphone amplifier and USB DAC. ”

“ A gem of a headphone amp/DAC at a very competitive price. Deserves to win plenty of friends. ”

“ It’s this combination of power and finesse that’s so alluring in something so affordably priced. ”

“ ...a crushingly competent piece of equipment for the asking price. ”

oppo

oppodigital.co.uk/where-to-buy

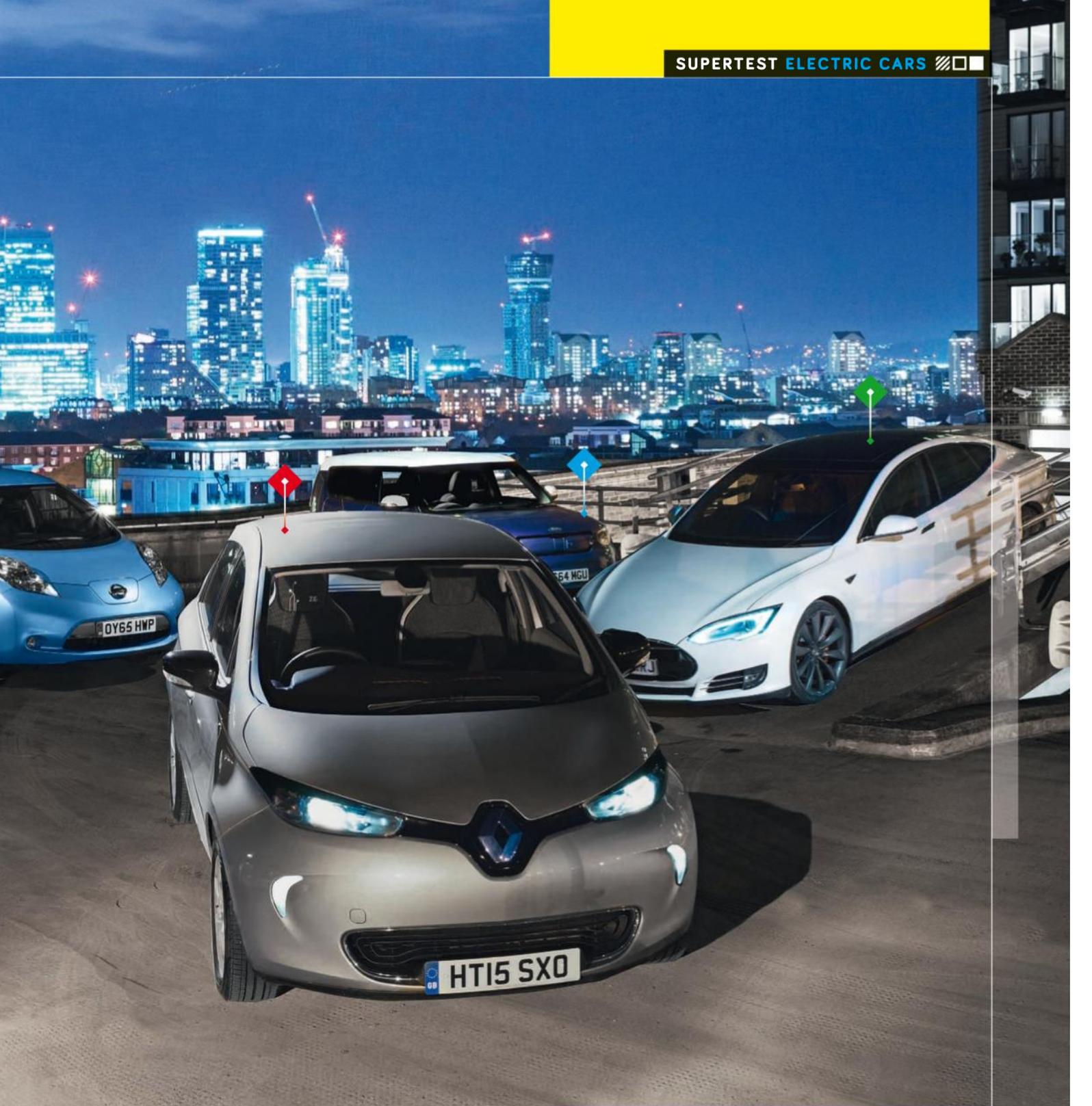


CARS ON TEST

- ◆ BMW i3
- ◆ Volkswagen e-Golf
- ◆ Nissan Leaf
- ◆ Kia Soul EV
- ◆ Tesla Model S P90D
- ◆ Renault Zoe



SPARK &



RIDE

One city, six cars. We saddled up half a dozen electric motors and challenged *Stuff's* best drivers to commute in them for one week. Did the Big Smoke beat them? Or is our battery-powered future finally here?

[Photography: Dom Romney]

“Acceleration is nippy and smooth, and for a tall car with thin wheels the i3 handles incredibly well”



◆ BMW i3



■ Price from £30,980 / bmw.co.uk

■ Driver Will Dunn, Contributor



Driver

Insult of choice
“Thou cream-faced loon!”

Driving song
Somewhere Only We Know
by Keane

Longest traffic jam 19 minutes

Last year I drove BMW's i8 hybrid supercar, and the only problem with it was the constant flashing effect caused by car fans taking pictures. If the i8 is a movie star, the i3 is one of those actors you recognise from a few adverts – noticeably different, better-looking than the crowd, but not to the extent that you'd drop your shopping for a picture.

Widescreen effect

The high driving position is superb, with a massive windscreen giving you an excellent view of London's heavy traffic, confusing lane systems and tight parking spaces. You get the visibility of a 4x4, but people won't think you're a selfish idiot.

Acceleration is nippy and smooth, and for a tall car with thin wheels the i3 handles incredibly well. You can't exactly throw it into a corner, but then there aren't a lot of corners to throw one's motor into on the average London commute. The city does have plenty of many-tentacled roundabouts to negotiate, and here the i3 excels. Those thin wheels contribute to a small turning circle, excellent for nipping into parking spaces and side roads.

They're not so great with potholes, though, and the light, stiff chassis (made from carbon-fibre-reinforced plastic) tends to amplify bumps in the road. On faster roads it's still very quiet and smooth, though.

Great in gridlock

Let's be honest: there's almost no point driving around most city centres, and life would be much better if people didn't. But they do, creating hundreds of square miles of angry gridlock. In an electric car, though, traffic jams become less frustrating: you might be moving at walking pace, but at least you're not burning money.

Better still, the lack of engine noise makes a bigger difference to audio quality than an overpowered sound system. In the i3, I actually enjoyed the logjam of Streatham High Road – more queuing just meant more of the excellent *Allusionist* podcast.

1



THE COMPACT ONE

1 Inside out

BMW offers additional interior options called Loft, Lodge and Suite; each features a different combination of colours and (mostly natural) materials.

2 Range rover

If you want the Range Extender you'll add a little over £3000 to the price, but you won't have to hire a petrol car to go on holiday.

3 Off the wall

It's no Tesla Powerwall, but the BMW Wallbox costs £315 and will charge the i3 in just three hours. It also matches the i3's swanky design.

4 Appy parking

The BMW i Remote app lets you unlock the i3, flash the headlights (if you've forgotten where you parked) and track charging on your phone.

4

Tech specs

Battery capacity

18.8kWh

Charging time

30mins-8hrs

Max range

99.4 miles

0-62mph

7.2 seconds

Top speed

93mph

Max power

125kw

Transmission

Automatic

Dimensions

400x204x158cm

Skateboard dashboard

The i3's interior is an appealing mix of forward-looking, pretend-eco luxury: the dashboard is a swoop of wood that looks like a posh skateboard, the two screens are good quality, and the doors are panelled in a futuristic-looking material made using fibres. The seats are a highlight – they're thin and light, but comfy (and heated). There's a deceptive amount of room in the back – open the rear doors and two adults can fit in fairly comfortably.

Going the distance

The range of the all-electric i3 is around 80 miles from a full battery

in regular Comfort mode, and 90-100 in Eco Pro mode – enough for a few days' commuting between charges. A full charge from a high-voltage outlet can take about three hours, and in a week I found I just needed to top it off a couple of times at the supermarket and the station.

If you regularly go long distance, there's a Range Extender option, which adds a small generator that kicks in when the battery gets low, effectively doubling the range and allowing you to use petrol stations (which are everywhere) rather than EV chargers (which aren't) for long trips. If this makes you doubt how

green the i3 is, you should know its eco credentials are laughable in the first place, because it's a car.

OK, commuter

If your commute falls within the national average of around 10 miles, the i3 makes a drivable choice for getting to work. The initial outlay is high but for that you get some nice luxury touches, and even at temporarily low petrol prices you'll be saving £90 a month on fuel. It handles well, takes a bootful of shopping and four people in comfort, and makes city driving easier and even fairly relaxing.

STUFF SAYS ★★★★★

Pricey but surprisingly roomy, the i3 pushes the boundaries of a small car in style

4



Driver

Insult of choice

"I don't know what you're doing, but it's not driving."

Driving song

Nightcall

by Kavinsky

Longest traffic jam

12 minutes

■ **Price** £31,680 / volkswagen.co.uk

■ **Driver** Tom Parsons, Online Deputy Editor

In some ways the e-Golf is the least interesting car of this whole test, but for the very same reasons it's also the best. See, the e-Golf is just like a 'normal' Golf only, well, electric. It's very much a Ronseal kind of car.

There are hints at the futuristic heart beating within the traditional underpinnings – a blue strip running through the lights and grille, blue stitching through the interior – but the average person won't have a clue that you're driving anything special at all.

That, in case you're wondering, is a good thing. I've driven Teslas and BMW i8s, and while the attention they get is initially a chest-puffing pleasure, by the third time you've

been stopped and grilled about how many miles you get to a charge when all you're trying to do is get through the door to Tesco and buy some milk, the novelty has worn off. During a week of driving the e-Golf around London not one soul gives it more than a glance.

And let's not forget that the regular Golf is a hugely popular car for good reason. Comfortable but dynamic, compact but practical: if ever there was a jack of all trades, the Golf is it, and so is the e-Golf. It's a five-door car with room for all the family and a decent amount of luggage, but it's small enough to make zipping around the city and squeezing into a parking space

easy – especially with the optional self-parking system, which is good value at £150.

Pedal power

It feels fast, too. The 0-62mph time of 10.4 seconds might not sound super-impressive, but it gets off the line very quickly and isn't slowed down by having to shift between gears – you just push the pedal and go. It nips in and out of traffic with ease.

In fact, over my week driving the e-Golf, I find myself using the Eco+ mode by default. This reduces acceleration power and top speed, and turns the air conditioning off in favour of

◆ **VOLKSWAGEN e-GOLF**

“There are hints at the futuristic heart beating within, like the blue strip running through the grille”

2



Tech specs

- Battery capacity**
24.2kWh
- Charging time**
30mins-13hrs
- Max range**
118 miles
- 0-62mph**
10.4 seconds
- Top speed**
87mph
- Max power**
85kw
- Transmission**
One-speed automatic
- Dimensions**
435x180x145cm

simple ventilation, but for my eight-mile commute across London I have no problem with the drop in performance.

Putting the miles in

Even with Eco+ switched on I never quite reach the 118-mile range that Volkswagen claims, but that's little surprise given the number of factors that have an impact, from the heaviness of your right foot to the outside temperature. Still, the 100 miles I do get are plenty for me to commute to work in the e-Golf for a week, and anyone who has access

to a charger at home (you can use a standard mains outlet or have a faster, dedicated wall box installed) will be able to travel much further in their e-Golf each day.

It's a pleasant place to munch up the miles, too. The seats are comfortable, the driving position natural, and the interior looks and feels pretty smart, with lovely blue strips of light reminding you that you're in a car that's a little different to the norm. The e-Golf also has an 8in touchscreen through which you can access the car's menus, CD player, DAB radio and sat-nav.

Roadblock ahead

There are still some general issues with running an electric car. I'm one of the millions who don't have provision to charge one at home, and that's a big barrier to ownership, while the variety of public charger networks can be confusing and irritating.

These are concerns for every electric car, though, and if they're not a problem for you, I'd definitely recommend the e-Golf. For eco-minded city dwellers, this is the car to get – as long as it's not attention you're after.

STUFF SAYS ★★★★★

Everything that's great about a normal Golf but with added eco excellence



1



THE STEALTH ONE

1 Smartphone savvy

The e-Golf supports both Apple CarPlay and Android Auto, so you can use the UI from your smartphone on the touchscreen.

2 The light fantastic

In the dark the arrangement of the LED headlights creates snazzy illuminations, while the C-shaped daytime running lights are nicely distinctive.

3 Hidden efficiency

It may look like a fossil fuel Golf, but the e-Golf's body has been tweaked all over to reduce drag and make it more aerodynamic.

4 A bit of a flap

The charging port is hidden beneath a standard fuel flap, unlike the other cars here. It supports the CCS (Combined Charging System) standard.

3



Driver

Insult of choice
 "Don't touch what I can't afford!"
Driving song
 Takin' A Ride
 by The Replacements
Longest traffic jam 33 minutes



◆ TESLA MODEL S P90D



THE ONE THAT DRIVES ITSELF

1 Big screen

The display doubles as a control panel and entertainment centre, with Spotify Premium installed as standard.

2 Home, James

Tesla's auto-pilot mode lets you drive along motorways autonomously, with no need to touch the car's controls.

3 Get a grip

Unlocking the Model S is as simple and elegant as walking up to its doors with its wireless key in your pocket.



■ Price from £92,400 / teslamotors.com

■ Driver Rob Leedham, Reviews Editor

The problem with a lot of electric cars is that they don't really look like the future. Or, in the case of the Renault Twizy, they resemble something you might find in a Christmas cracker. Tesla's Model S is different, though. Not just because it allows you to drive hands-free down the M4 at 70mph. It's also cool. On the grand scale of tech desirability, this sedan oozes with sub-zero allure.

Ludicrously tasty

From the moment its aluminium handles first slide out of their door frame to greet you, the Model S is a delight to rest your cheeks in. The P90D iteration I'm testing offers up to 316 miles of blissful driving. Granted, I sacrifice some of this total via its 'Ludicrous' mode that takes me from 0-60 mph in a blistering 2.8 seconds. But you'd do the same, right?

As with all of the Model S's controls, Ludicrous is engaged using the 17in tablet slap bang in the middle of the dashboard. Where other cars offer something akin to a sat-nav to play with, the Model S's display is a joy to prod at. It even has a built-in 3G SIM, so you can browse Stuff.tv from the motorway services of your choice, although it's not quite fast enough for Netflix.

Model behaviour

So what of the Model S's actual drive? Compared to the rest of this car, it's relatively unremarkable. At least, you won't spend too much time thinking about it. With easily read directions on the display and a well-positioned driver's seat, I feel perfectly set to traverse the streets of London town. Perhaps the greatest compliment you can pay the Model S is that driving it doesn't feel like a huge step change from a petrol-powered motor.

Car park crisis

My most nerve-shredding moment in the Model S comes while trying to navigate it to the top of London's most cramped multi-storey car park. With the help of a sensor array going off like haywire and a steady foot on the accelerator, I'm able to slowly creep upstairs while cursing my colleagues and their smaller, more light-footed vehicles.

So yeah, if you do want a cheap, compact, eco-friendly vehicle, this isn't for you. That's why the Model 3 is set to launch late next year, so Tesla can start competing with the BMW i3s of this world. But if you've got the funds, the Model S is an electric dream.

Tech specs

- Battery capacity**
90kWh
- Charging time**
30mins-11hrs
- Max range**
316 miles
- 0-62mph**
2.8 seconds
- Top speed**
155mph
- Max power**
456kw
- Transmission**
One-speed automatic
- Dimensions**
497x219x144cm

STUFF SAYS ★★★★★

An electric car to lust over – although not necessarily one that's ideal for city life



Driver

Insult of choice
 "Ever thought about getting a self-driving car, mate?"
Driving song
 Run You by The Qemists
Longest traffic jam
 38 minutes



NISSAN LEAF



1



THE QUIETLY STYLISH ONE

1 Cabin fever
 Nissan has put a lot of effort into making the cabin a pleasant place to be — no cheap plastics here.

2 Less is more
 The dash lights up to let you know the regenerative braking is adding a few miles to your range.

3 A bit of stick
 The stubby gear shifter takes some getting used to. You can probably blame the Prius for that.

■ **Price** from £21,530 / nissan.co.uk
 ■ **Driver** Tom Morgan, Online News Editor

Nissan drops off the Leaf on the back of a low loader. That means the 30kWh battery is fully charged for a range of about 110 miles, but I'm not convinced that will be enough for an entire week of commuting across south London to the *Stuff* office.

That's why I start out in Eco mode: the power-limiting system that squeezes out a few more miles between charges. It's fine for city driving, where you rarely get above 30mph, but it feels a bit like driving a milk float. Unless you floor it, you merely ease off the line at red lights and take longer to reach cruising speed.

From bored to floored
 Once I'm away from the central London traffic and the roads open up a bit, the Leaf just feels boring to drive. By the end of day two, it's time to ditch caution and switch to Normal mode.

The difference is like night and day: everything feels more responsive, with the power coming on as soon as you dip the accelerator. It might take over 11 seconds to hit 62, but it seems quicker because there's no delay while you wait for revs to build. I might have figuratively salted the earth of the five trees that 'grow' on the dashboard to show you're

driving efficiently, but I'm having a much better time behind the wheel.

Putting in a shift
 I'm loving the subtle styling, too. Like the e-Golf, it feels like a car that just happens to have an electric motor, although the stubby gear-shifter acts as a reminder you aren't driving a normal car. You push up for reverse and down for drive, which just feels upside down. It's an identical layout to the Toyota Prius, which makes perfect sense seeing as Nissan reckons up to 90% of Leaf owners will be ex-Prius drivers. For everyone else, though (me included), it takes a while adjust to this backwards style, especially when reverse parking.

It takes about three days of back and forth to the office before I lose my nerve and head for a charging point — the 6ft mains adaptor was never going to stretch up four storeys to my flat.

I could have driven a mile up the road, plugged in the Leaf at a charging point and walked home instead, but the fast chargers at Westfield Stratford were just too tempting. I might not have cooked a single meal during my week with the Leaf, but I did almost earn a whole chicken on my Nando's card.

Tech specs

- Battery capacity**
30kWh
- Charging time**
30mins-15hrs
- Max range**
110 miles
- 0-62mph**
11.5 seconds
- Top speed**
90mph
- Max power**
80kw
- Transmission**
Automatic
- Dimensions**
445x177x155cm

STUFF SAYS ★★★★★

Packed with gadgets and room for the kids, the Leaf is a fine car, not just a fine electric car



Driver

Insult of choice
 "My Kia totally beats your Tesla"
Driving song
 Work by Rihanna
Longest traffic jam 30 minutes

2



◆ KIA SOUL EV 2015

1



THE 'JOY TO DRIVE' ONE

1 Dashing looks

The dash offers premium features such as a DAB radio, but sadly no Apple CarPlay or Android Auto support.

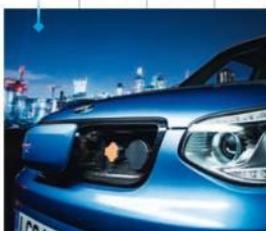
2 In clover

The clover-shaped hubcaps add to the Soul EV's sense of style (at least they did until I scratched them on the kerb).

3 Secret powers

A door on the front of the car hides the charging ports, while cables are neatly stored under a panel in the boot.

3



■ **Price** £24,195 / kia.co.uk
 ■ **Driver** Guy Cocker, Global Editor-in-Chief

I'm a vegetarian. I voted Green. I cycle 10 miles to work most days. Basically, I'm exactly the sort of *Guardian*-reading cliché that Kia no doubt has in mind as a potential customer for its first electric vehicle.

The Soul EV is Kia's take on the petrol-driven Soul (starting price: £12,800). For nearly double the cash, you get a car that can average 95 miles from its batteries, costs around £2.80 to charge, and therefore runs for just 3p per mile. It also comes with Kia's excellent seven-year warranty, which covers the entire car and its batteries.

Big and boxy

Of all the cars in our test, the Kia is one of the most well suited to city use. The boxy design and lofty driving position mean that I feel totally aware of the car's physical dimensions, making it ideal for anyone daunted by the idea of driving in the city.

As with any car, driving the Soul EV through London at rush hour will make you seriously question why you choose to live there – a commute that takes 50 minutes on my bike takes up to 90 minutes by car. Outside rush hour, though, driving the Soul EV is

a delight: 285Nm of instant torque means you can drop most other cars when the lights turn green. At 30mph the ride is smooth and very, very quiet.

Lap of luxury

Given the Soul EV costs nearly twice the price of the standard Soul, Kia has gone all out to furnish it with luxury touches. The front seats and steering wheel are heated and there's an abundance of cool tech – a touchscreen console, OLED digital instruments and even speaker lights that flash in time to the music.

The Soul EV is a joy to have around at the weekend. I'm able to stock up at the supermarket, make a trip to Ikea without having to rope in a car-owning friend, even pretend to be a proper adult and pick someone up for a date. Not having to think about the capital's £11.50-per-day congestion charge is also particularly liberating.

The final reckoning

The biggest reason not to buy the Soul EV is its price – it's more expensive than the Nissan Leaf, and not much cheaper than the superior e-Golf or BMW i3. I liked the Soul EV, but given the choice, I'd much rather have the Golf or the i3.

Tech specs

- Battery capacity** 27kWh
- Charging time** 33mins-14hrs
- Max range** 132 miles
- 0-62mph** 10.8 seconds
- Top speed** 90mph
- Max power** 81.4kw
- Transmission** One-speed automatic
- Dimensions** 414x180x159cm

STUFF SAYS ★★☆☆☆

A fun car for city use, but I'd pay slightly more for the VW or BMW... or less for the Nissan



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Home Cinema Choice 'Best Buy',
July 2014



Trusted Reviews 'Recommended',
October 2014



What Hi-Fi? Awards 2015,
'Product of the Year'



AV Forums 'Highly Recommended',
July 2014



Tech Radar '1st in Tech Radars
Top 10 soundbars', March 2015

◆ RENAULT ZOE



3 4

■ **Price** from £13,945 / renault.co.uk
 ■ **Driver** Tom Wiggins, Deputy Editor

Whenever I drive an electric car it always takes a while to shake off the feeling that I'm behind the wheel of a golf buggy that's been sent back from the future – and when I climbed aboard the Zoe for the first time, that desire to wear some sort of spacesuit/plus-fours combo came flooding back.

For starters, it doesn't have a key. Instead, you get a plastic card that must be stowed in a slot just under the centre console. Insert it, hit the start button and... silence. That's the weirdest thing about being in an electric car: it can be ready to roll but you can be completely oblivious.

The new normal

That's not to say it looks like a car from the future. The Zoe's certainly not an acquired taste like the boxy BMW or lumpy Leaf but it won't turn any heads either. If it was a house, estate agents would call it cosy, and while the interior's nothing special, it feels like being inside any other small car. But I like that. For electric cars to become the norm, they need to feel so – and the Zoe does.

This being a city car test I decide to drive the Zoe straight through the centre of London during rush hour. In for a penny and all that. At first the silence is odd but, out on the road, with music streaming over Bluetooth from your phone and 'normal' cars passing by, you soon forget about it and concentrate on your driving. You need to if you don't want to get eaten alive by furious commuters.

The Zoe holds its own against the Bentleys of Knightsbridge and the static procession of black cabs down Piccadilly. In fact, it feels nippier than a petrol car of its size, and on a smooth road it really glides. And even though it takes up just as much space as a petrol-engined car, it's exempt from the congestion charge.

Beware the Shard

The 7in touchscreen and TomTom sat-nav are adequate if nothing more, but that's common in cars worth a lot more than this. It only

struggles when we're dwarfed by the Square Mile's tall buildings and the GPS gets confused. A quick look at Google Maps on my phone (while pulled over, obviously) and we're back in business.

On a power trip

When I got in, the Zoe had a full battery, giving it a range of around 78 miles (it'll do over 100 in warmer weather). I needed to get across London and back, which was a task well within the Zoe's capabilities. The saying goes that in London you're never more than six feet from a rat. In truth it's probably closer to 160 feet – and while charge points aren't quite as common as rodents, there are way more than you think.

Even with about half of the fast chargers at Westfield's retail Death Star in Stratford seemingly out of action, I plugged in for 35 minutes then put around 15 miles on the clock. It still had 37 miles left when I gave it back. Range anxiety? What's that? That said, I never strayed outside Zone 5 or planned any journeys over 15 miles. Outside the city limits, it would've been different.

What is an issue is charging at home. I don't have a driveway, so topping it up Chez Wiggo without trailing a cable across the pavement and tripping up the postman was out of the question – and that would be a huge barrier to owning any of these cars, not just the Renault.

Less car, more VFM

It's hard to fault the Zoe, but it never feels much more than the minimum you'd expect of a modern car; there are no bells or whistles (Renault has opted for a more traditional horn instead), but that's reflected in the price. A Zoe is over 10 grand cheaper than most of the other cars here, and less than a fifth of the price of a Tesla. Sure, you're getting a lot less car, but for getting around the city there's no way the Muskmobile is five times better. Just ask Rob Leedham about his tight-fitting adventures in an East London car park...



Driver

Insult of choice

"Get a move on, fossil fuel!"

Driving song

Wherever I May Roam
by Metallica

Longest traffic jam

18 minutes

Tech specs

Battery capacity

22kWh

Charging time

1-9 hours

Max range

106 miles

0-62mph

13.5 seconds

Top speed

84mph

Max power

65kw

Transmission

Automatic

Dimensions

408x194x156cm

STUFF SAYS ★★★★★

Solid if unspectacular, the Zoe feels like driving any small car – but we like that

“The Zoe feels nipper than a petrol car and holds its own against the Bentleys of Knightsbridge”



1



THE LITTLE ONE

1 Chhaarrggge!
The charging port is hidden behind the badge on the front. It feels more like docking a spaceship than refuelling a car.

2 Cut a dash
The dash isn't very tall but it's clean and uncluttered, telling you everything you need to know: speed, range and battery status.

3 Handy feature
The Zoe was the only car we tested with an actual, mechanical handbrake. This is good for your peace of mind.

4 It's behind you
Whack it in reverse and a rear view camera pops up on the screen. On a car of the Zoe's size and price, it feels like a real bonus.

■ VOLKSWAGEN e-GOLF

+ Now add these



POD Point Solo S3 wall charger
from £390 (with OLEV grant) / pod-point.com

This 3.7kWh charger will save around four hours on the time taken to charge your e-Golf from empty, and can be mounted next to your drive for juicy convenience.



Android Auto
Free / play.google.com

If you've got an iPhone, CarPlay will do fine; but if you have the choice between the two infotainment systems, go for Android Auto, mainly because Google Maps is a better sat-nav than Apple Maps. For a full comparative review, see p90.

The idea that in our brave new future we should be driving an electric version of a car that's been around since the year Ceefax was introduced (that's 1974, TV-based proto-internet information service fans) might seem a little underwhelming, but there's a good reason the e-Golf has powered its way to the top of our multi-storey car park of victory.

You see, humans like cars. A lot. And when you think about it, they haven't changed much in over 100 years: four wheels, a motor and something to steer with (that's cars, not humans). Sure, we've

got self-parking and USB ports now (cars again) but the fundamentals are still the same. The car is so ingrained in our society that any major upheaval would struggle to make an impact. Just look at the Sinclair C5, the Segway or *Stuff's* patented rocket-powered flip-flops.

So having something familiar to ease us into our tree-hugging electric future is crucial – and the e-Golf is it. The Tesla is an incredible piece of engineering but it's just too expensive for, well, almost everybody other than Elon Musk.

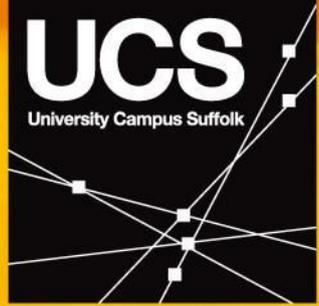
If you're doing mainly short-range journeys,

many of these cars would do the job – but for the best combination of price, practicality and premium feel the VW just edges it, particularly considering it'll go further on a charge than the BMW i3, its nearest rival.

Buy yourself a new Golf and you'll get admiring glances from the neighbours. Buy yourself an e-Golf and you'll get admiring glances from the neighbours, who don't know the difference, and the local tech-heads as well. For an electric city car that doesn't require a volt of compromise, it's unbeatable.

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FUELISTH PREDICTIONS

What will your car look like in 2020?

Not convinced by any of the electric runabouts we've tested here? Here's what else is about to pimp your ride

■ IT'LL STEER ITSELF

■ Tesla Model 3 due 2017

Tesla's Model 3 is supposed to be the affordable electric car that'll turn us all into battery-powered movers, but that doesn't mean it won't be stuffed with all of Tesla's greatest gadgets – including the Autopilot mode that once whisked *Stuff* along the M4 without our hands on the wheel.

The 215-mile Model 3 might even have a whole new version of the tech. Tesla CEO Elon Musk says that complete autonomy is only two years away; and while our roads probably aren't ready for that yet, the relatively bare interior

of the Model 3 could signal a concerted push towards letting the car do more of the work for you, potentially with a cool HUD-style dash projected onto the windscreen. Musk even tweeted that it would "feel like a spaceship" to drive. Hopefully he means it'll be really futuristic, rather than leaving the ground at high speed with flames pouring out the back.

The Model 3 will also come with the Model S's Ludicrous mode, which turns everything up to 11. Handy if you're running late for work...



Order! Order!

Nearly 400,000 people have put down a US\$1000 deposit on a Tesla Model 3 – lend us a tenner, eh?

Price drop?

Musk reckons there'll be an even more affordable Tesla further down the line, so keep saving.

IT DOESN'T HAVE TO LOOK BORING

Morgan EV3 due autumn 2016

Morgan's EV3 looks like the product of some steampunk headquarters rising from the land coughing thick smoke into the already dirty sky above. In reality, Morgan's home is nestled in the Malvern Hills, where the company has been churning out three-wheelers since the 1920s.

What sets the EV3 apart is the 46kW electric motor that drives the rear wheel up to 90mph. Inspired by *Metropolis*-style robots and long-nosed racers from the '30s, the EV3 is a unique mixture of goggle-wearing tradition, retro-futurism and contemporary tech: the frame is made of ash wood, the body is composite carbon and the fins at the

front that keep the motor and batteries cool are brass. It looks like it's come from the past but the EV3 has its wheels very much pointed towards the future.

The 20KWh battery gives the EV3 a range of 150 miles, but with no storage space and only one seat, it's not a car you'll want to take camping in the Brecon Beacons. But that would be missing the point. The EV3 is for the thrill of driving with your backside inches off the asphalt. And as long as you're not a window cleaner (there's nowhere to put your ladders) it'll get you to work just as well as anything on the preceding 12 pages – and it'll do it in considerably finer style.

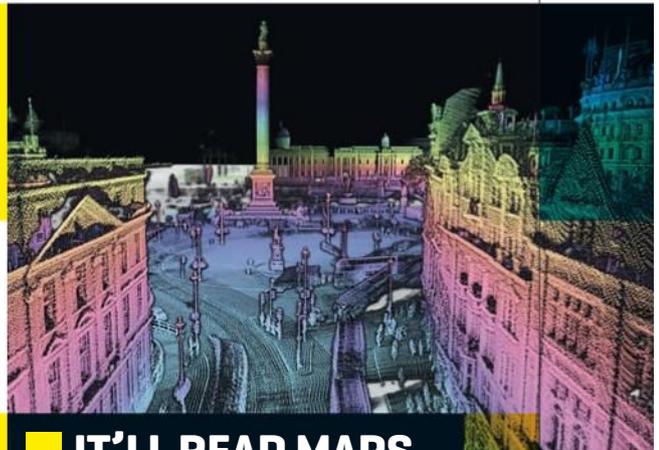


1 Eye eye

The one-eyed, off-centre front end is designed to reflect the EV3's lopsided driving position.

2 We have lift-off

The EV3's raised rear end is a throwback to Morgan's three-wheeled racers of the 1930s.



IT'LL READ MAPS

Here Maps due 2017

With trials of driverless cars expected to start next year, 2016 could well be the last time you need to worry about, y'know, actually driving anywhere. But before we get to hand everything over to the robots, they'll need to know where they're going.

Enter Here Maps. As well as mapping the road layout, Here has used LiDAR (Light Detection And Ranging) technology to scan the surroundings, because just knowing which way the road bends isn't enough for your new robo-chauffeur: it'll also need to be aware

of kerbs, trees and road markings in minute detail. The LiDAR-scanned map can provide that down to 10cm, using a car with a rig on the roof to collect 24MP 360° photos and 700,000 3D data sections per second and marry them up to GPS info.

The results look a bit like Predator's holiday snaps from his long weekend in London. The maps are constantly updated in near real time, so when it comes to having your car take the wheel, you shouldn't have to worry about telling it where to go.





■ IT'LL CHARGE ITSELF

■ Techrules TREV due 2019

First there was the Vauxhall Adam and Renault Zoe, now there's the Techrules Trevor – or TREV to its friends. The 217mph, 1030bhp electric hypercar looks destined to make plenty of those thanks to its clever turbine recharging system (the TR bit of TREV), which takes the place of the range-boosting petrol engine you'll find in most hybrids.

Air is drawn into a micro-turbine, which turns to drive a generator, converting hot

air into energy to charge the car's battery in just 40 minutes. Sounds too good to be true, right? Techrules' figures are lofty – 1569mpg and a range of over 1200 miles – but the science seems plausible.

Real-life range is more likely to be 90 or 100 miles, but if it can do that while delivering on the promise of 0–62mph in 2.5 seconds, then we'll forgive TREV for not quite making it to the Pyrenees and back.

■ IT'LL GO OFF ROAD

■ Mitsubishi eX due 2020

It's all very well having an electric car to get you to Starbucks and back – but couldn't all this torque be put to better use away from the solid safety of the road? Mitsubishi reckons so, with the eX, its all-electric SUV crossover.

It's still only a concept for now, but when it hits the showrooms some time

before the decade is out, the eX is expected to have an all-wheel-drive system and an impressive range of 250 miles.

So even if you're stuck half way up a mountain in the Hebrides, it should still get you to Starbucks when that craving for a double caramel macchiato just gets too much.



1 Petrol power

The GT Concept isn't electric. Underneath the bonnet is a one-litre, 143hp engine that'll hit 134mph.

2 Speed dial

The dials are actually projection surfaces that can change to show info that suits how you're driving.

3 Backing vocals

What if you lose your voice? The round touchpad on the centre console can be used instead.



IT'LL BE VOICE-CONTROLLED

Vauxhall GT Concept date tba

It might not be electric, but that part's not what interests us about the GT Concept – Vauxhall has given it a self-learning Human Machine Interface that's almost entirely voice-controlled.

You won't be doing any steering or braking with your vocal cords but, like having Siri as a co-driver, anything you'd previously have to press a button or twist a dial to change is done just by telling the car what you want.

Still feel like an idiot talking to yourself? There's also a central touchpad for backup. That might also be a better option if you're prone to the odd outburst

of commuter karaoke. The self-learning aspect means it'll pick up on your quirks and habits and make adjustments automatically, so it'll even learn what music to play when you set off for work in the morning (*Lovely Day* by Bill Withers, obv's) and how cool you'll want the air-con when you get in to go home.

It can talk back, too. Thanks to a safety system that monitors the car's surroundings, it could alert you to a motorcyclist buzzing around your blind spot, with rear-view video cameras mounted on each of the front wheel arches rather than boring old mirrors.



IT'LL SAVE THE WORLD

Shell Concept Car

Even if electric cars are the future, building one is still a kick in the South Pole for the planet. With one seat up front and two behind, Shell's plan to clean things up looks like a cross between a G-Wiz and a Johnny Cab from *Total Recall* but its eco credentials are impressive. Almost the entire thing can be recycled and Shell reckons it uses half the energy of a 'normal' car to build and run.



IT'LL BEND TO YOUR WILL

BMW Vision Next 100

The Vision Next 100 might look like what would happen if there were an armadillo in the next *Transformers* movie, but BMW's concept car promises to shapeshift as you drive. That doesn't mean it'll shrink to squeeze through traffic jams, but it will get longer at speed to improve stability, while the front alters when you steer to accommodate the movement of the wheels.

App:roved

FOR TIME KILLERS

● Reddit

Until now, mobile users have largely been spared from the time-sink that is Reddit, on the basis that the smartphone experience was risible. Now, though, an endless rabbit-hole of funny cat GIFs, gorgeous data visualisations and chats on any subject you can imagine awaits. Bar the odd niggle – taking too many steps to access some content (the aforementioned cat GIFs) – the Reddit app is fast, responsive and absurdly engrossing. Send help.

Stuff says ★★★★★
Efree / Android, iOS

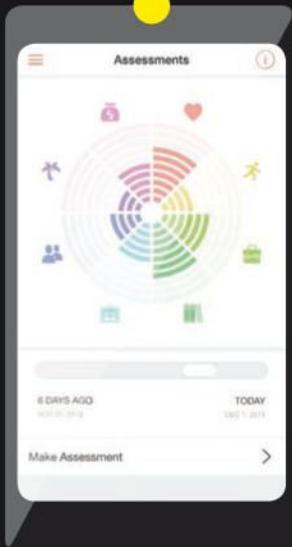


FOR WELLNESS WISHERS

● Remente

Wellbeing apps have a tendency to be fluffy and not terribly helpful, but Remente's smarter than most. It tracks key areas of your life, and has you set goals to form good habits. The app makes helpful suggestions, from planning time with loved ones to binge-watching TV shows. Some stats and a bunch of courses require subscription IAP (ironic for an app whose intro gripes about expensive rivals), but both free and paid Remente may help you successfully destress and unwind.

Stuff says ★★★★★
Efree (IAPs) / Android, iOS



FOR OATMEAL EATERS

● Exploding Kittens

In hindsight, of course an Oatmeal-illustrated card game that's essentially Russian roulette with exploding kittens would become a Kickstarter sensation. In its move to app you lose the tactile nature of cards, but *Exploding Kittens* nonetheless retains its deranged nature, with all kinds of oddball animations and sound effects. There's no single-player mode, but multiplayer works online, so you can TRIPLE SLAP! complete strangers before summoning the mantis shrimp.

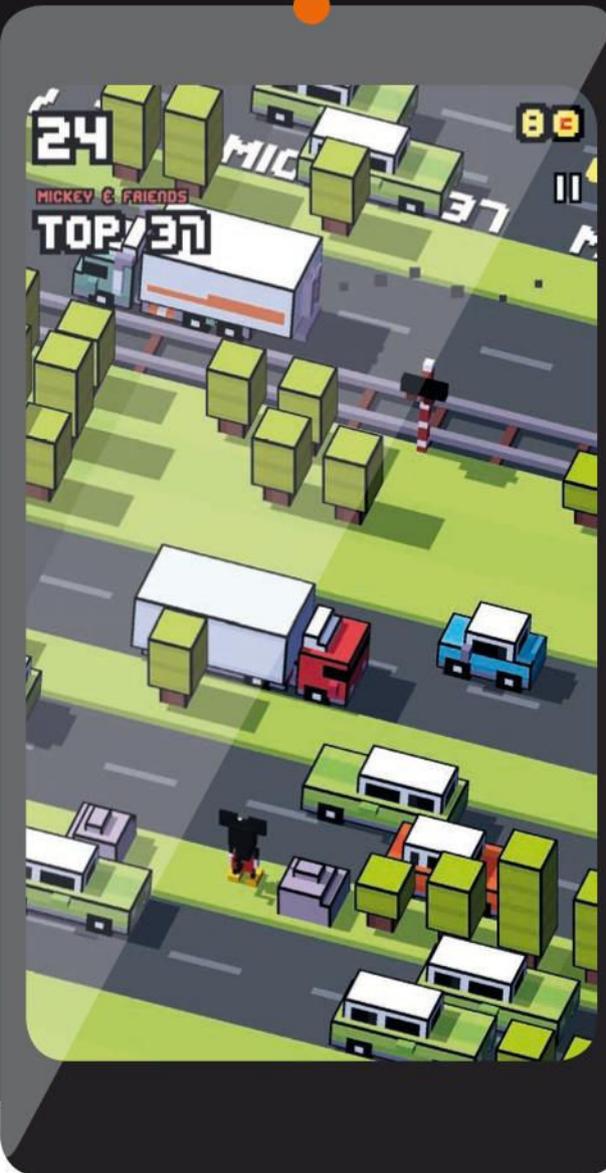
Stuff says ★★★★★
£1.69 / Android • £1.49 / iOS

FOR TOON CROSSERS

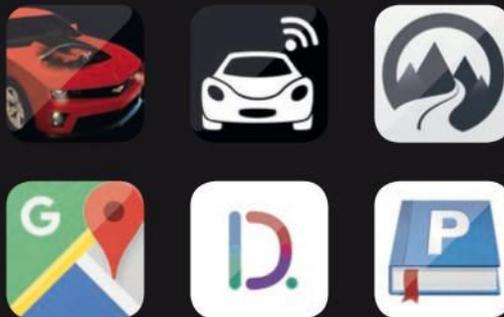
● Disney Crossy Road

Endless *Frogger* meets Disney in a rare example of an indie dev / moviehouse tie-up that works perfectly. The mechanics are familiar: tap and swipe to have a blocky protagonist weave through traffic and deftly jump across rivers. But the addition of Disney characters finds you battling your way through retro versions of famous animated worlds, dodging tumbling blocks in *Toy Story*, filling memories for bonuses in *Inside Out*, and avoiding a psychotic suit of armour in *Haunted Mansion*.

Stuff says ★★★★★
Efree / Android, iOS



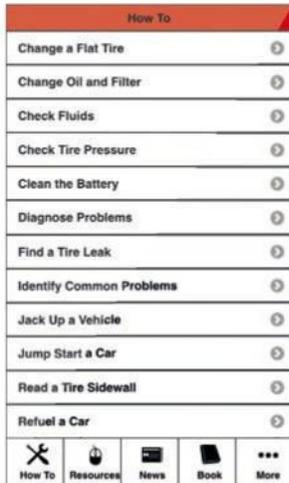
Mini meme



GRAND TECH'D AUTO

MORE IN-CAR TECH: p90

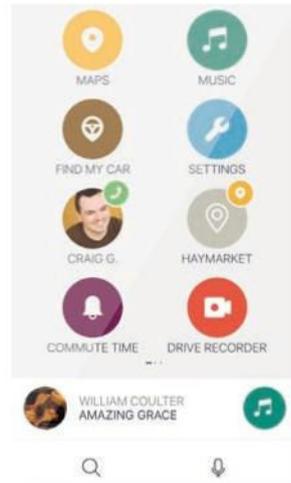
From one-tap dashboard tricks to navigation and parking, these six apps will transform even the dumbest car into a KITT-like sensation



● Auto Upkeep

It's far from the prettiest app in the world and is in effect a chunk of a book (unsubtly pimped by way of the 'Book' tab), but Auto Upkeep's worth having on your phone for when your car goes wrong. You get straightforward instructions on diagnosing common problems and performing basic repairs, from changing tyres to replacing lights.

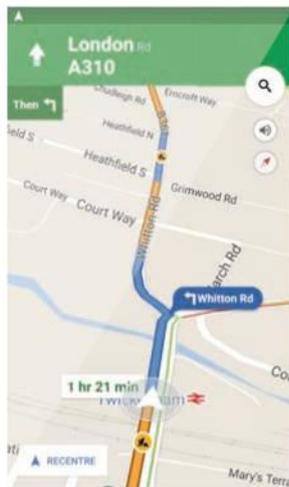
Stuff says ★★☆☆☆
£free / Android, iOS



● Open Road

Of all the dashboard apps we've seen, Open Road is by far the most slick. Its big buttons are configurable, so you can have one-tap access to music, contacts and locations. You get built-in video recording, integrated navigation, a gestural music player, and voice input to further speed things along and keep your hands on the wheel.

Stuff says ★★★★★
£7.99 / iOS



● Google Maps

This one's a bit Captain Obvious, but we wouldn't be without Google Maps in the car. It's great at finding points of interest, and the turn-by-turn directions (with re-routing smarts) are easy to follow. Brilliantly, you can save chunks of maps offline (we grabbed the entire south of England — only 1.5GB!), which remain usable for navigation.

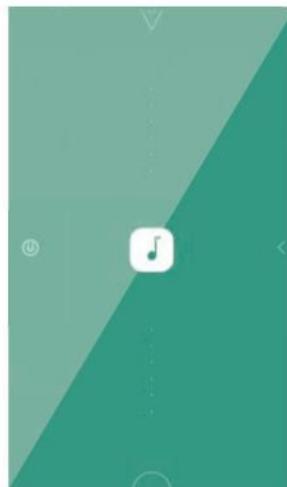
Stuff says ★★★★★
£free / Android, iOS



● Drivermatics

It's becoming common for drivers to arm themselves with dash cams, to keep a record of prangs (and potentially punchy post-prang rows regarding who was to blame). But Drivermatics is more than just a recorder, also offering monitoring and, amusingly, scoring. Think you're a great driver? Find out by perusing the league tables.

Stuff says ★★★★★
£free / Android, iOS



● Drivemode

This Android app may lack the polish of Open Road (top right), but it has a smartly conceived full-screen eyes-free interface. Once that's embedded in your muscle memory, it's a cinch to change songs, contact friends and send messages with a few swipes and taps. And the app's features make it handy beyond driving — in the gym, for example.

Stuff says ★★★★★
£free / Android



● Parkopedia

If you tend to find yourself semi-randomly pootling about new cities before finally parking somewhere that merrily charges you a tenner an hour, you need Parkopedia. It covers over 75 countries, and makes it insanely easy to compare car park features, such as opening hours, prices, and — if you go for a small IAP — quality and availability.

Stuff says ★★★★★
£free / Android, iOS, Windows

Make 9 a double

Huawei's new flagship phone boasts an innovative dual camera for taking some seriously stylish shots – but there's more to it than that...

£450 / huawei.com

Being first matters. It gets your name in the history books and provides suprema bragging rights. Huawei likes being first.

The P9 is the first phone to feature a dual-camera setup where one of the cameras is monochrome and the other is colour. It's easily one of the most interesting smartphone cameras we've seen recently, as it offers something genuinely new.

Yes, we've seen dual-camera setups before in phones such as the HTC One M8, but instead of having one normal camera and a weaker second one that gathers depth data, here you get two high-quality 12MP Sony sensors, each with an f/2.2 lens – and the twist is that one of the sensors is monochrome. Sure, the P9 can take arty black and white shots, but its main function is to reduce noise, and therefore radically boost image quality.

Huawei has jumped on this tech early because, quite rightly, it knows others are going to. But will we see a better take on this idea before 2016 is done?



1 Taking the P

An ultra-slim metal phone with curved edges, the P9 feels and looks expensive, and with a 5.2in screen, it's easy to handle. There are some great hardware extras: the fingerprint scanner is terrific, plus the microSD card slot and extra SIM slot earn nerd points.

2 Neo screen

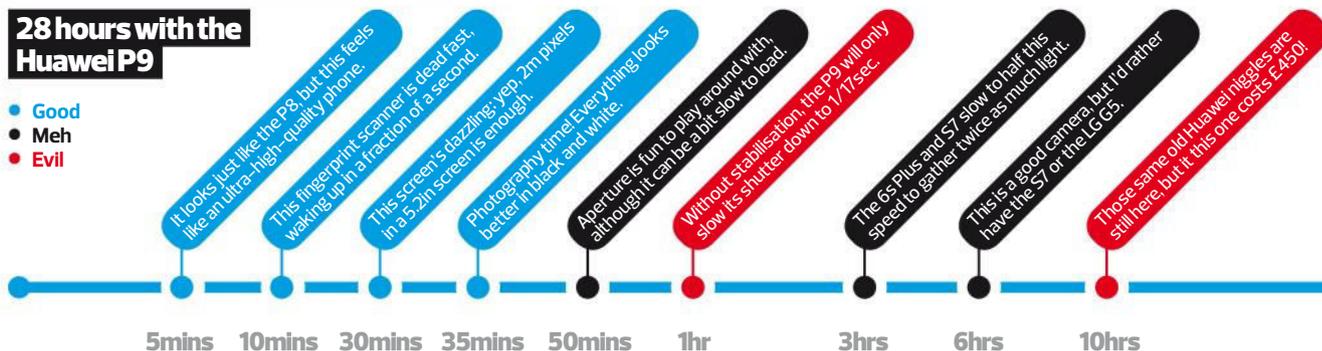
The display goes as bright as you like with good contrast and poppy colours that, while pretty energetic, don't look overdone. Huawei aimed for a 'cinema-grade' colour palette rather than the plain old sRGB one. Viewing angles are just as impressive.

3 Hunting Emus

As usual, Huawei's pasted the latest version of its EmotionUI on to Android. While it does include Now on Tap, it doesn't have an apps menu. What will grate more is how much extra rubbish Huawei has shovelled on to this rather expensive phone.

28 hours with the Huawei P9

- Good
- Meh
- Evil



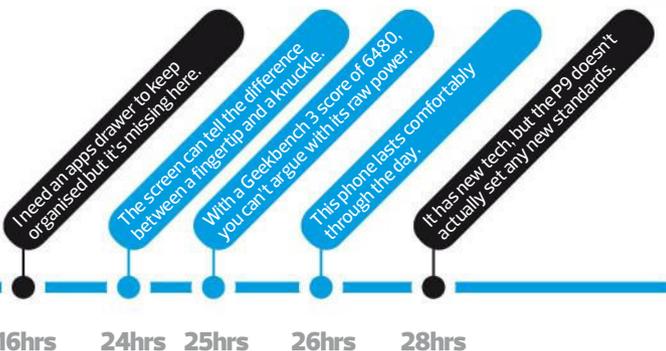


4 Fizzle out

The black-and-white sensor should help improve low-light performance, but results aren't all we'd hoped for: indoor shots are still quite noisy, and there's a fizziness to fine detail. The lenses are slower than big rivals and it lacks stabilisation.

5 Cell sell

The P9's processor is a powerful Kirin 955, an ever-so-slightly less advanced CPU than the one in the Galaxy S7. This level of power matched with 3GB RAM means the Huawei P9 is fast no matter what you're doing. It also has a solid battery life.



Tech specs

Screen 5.2in FHD 1920x1080
Processor 2.5GHz 64-bit octa-core Kirin 955
OS EmotionUI based on Android 6.0
Cameras 2x12MP rear, 8MP front
Battery 3000mAh **Storage** 32/64GB plus microSD
RAM 3GB **Dimensions** 145x71x6.9mm, 144g

Time to backtrack...

I've given the P9's camera a bit of a shoeing, and now I'm going to contradict myself by saying I still like it:



Shoots and scores

As long as you don't put it into any intensely challenging conditions, the P9's shots are very punchy. There is a bit of shutter lag in poor lighting but this is a fast, responsive camera.



DSLR-style

Huawei has redesigned its app to simplify access to the extra modes. Just flick out from the shutter button and an array of controls pops out, letting you change shutter speed, white balance and more.



Background blur

The aperture simulation is a pleasant surprise. I've often called this mode a worthless gimmick, but the P9's wide-aperture photography can make even the most mundane subject look arty.



Selfie importance

This Huawei can't shoot video at 4K, maxing out at 1080p @ 60fps. Still, the selfie camera, which has an 8MP sensor, is more than good enough, dealing with indoor lighting pretty well.



The P9 does make a case for multi-sensor-computational cameras... but we're likely to see better attempts before long. I'm a little disappointed with the P9's camera – it promised the world but doesn't quite deliver. It takes good high-contrast B&W and daylight shots, though, and I like its screen, battery life and power. @wwwdotandrew

STUFF SAYS ★★★★★

An innovative camera, plenty of power and lovely build aren't quite enough to add up to perfection



SR60e
Aug. 2014



SR325e
Sep. 2014



SR125e
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1 LG OLED55C6V
We've fallen hard for LG's OLEDs in the past, but can the South Korean manufacturer keep its TV crown?

2 Panasonic TX-65DX750
This deluxe model with high dynamic range (HDR) looks to steer Panasonic back to glory.

3 Philips 65PUS8601
A 4K TV with its own backlighting rig and detachable speakers: it's a swish bit of kit.

4 Samsung UE55KS7000
Samsung's 'affordable' model, this set still costs £1500 and packs plenty of telly tech.



It's time to 4K out

RIP, HD TV. Ultra HD is no longer next year's tech – it's ready to dazzle your living room right now. So which set should you get?



Has your best mate suddenly become an expert in Slovakia's centre-back conundrum? Perhaps they've

announced themselves as the world's foremost authority on water polo tactics? Fear not, they won't be this insufferable for long.

Once the Olympics and Euro 2016 are over, you'll want to own at least one triumphant memento from the 'summer of sport'. Should Harry Kane, Jess Ennis-Hill and co fail to deliver the goods, then a 4K TV will do the job just fine. There's never been

a better moment to invest in an Ultra High-Def tellybox. Even if the only 'shock exit' you're interested in is the next grizzly death in *Game Of Thrones*.

With every major streaming service now offering its wares in 4K, UHD Blu-rays having finally arrived and a fancy new PlayStation 4 on the way, we've collated four of the best new TVs that (quite a lot of) money can buy. And if you don't happen to have a spare grand lying around? We've picked out four more affordable alternatives as well, because this is a bandwagon you're going to want to jump on.

Out with the old and in with the future—proofed OLED

This 55in set is the real McCoy, the genuine article — or so its 'UHD Premium' certification would have you believe. Sounds fancy, right?

Well, all this industry tag really tells you is that the LG we have here meets the must-have 'premium' specs for resplendent TV viewing. It's our job to let you know whether it comes good on

that promise. Thankfully, that task is even easier than Germany's group at the Euros.

With HDR support and a 10-bit panel capable of producing more colours than the costume department on a Wes Anderson movie, LG's C6 is truly stunning. Unlike the other models here it uses an OLED panel instead of the LED ones that Samsung, Philips

and Panasonic usually favour. The benefits? This set can go blacker than King Joffrey's heart and will dazzle your senses with a 540-nit minimum peak brightness, which in TV terms is a whole lot of nits.

It also boasts support for both HDR standards: HDR10 and Dolby Vision. This means you'll be able to watch compatible content from Amazon, Netflix and Ultra HD

Blu-rays regardless of which format wins out in the future. Because if you're planning to spend £3K on a TV, the last thing you want is for it to offer worse picture quality in a few years' time.

Packed full of tech and with jaw-dropping performance, this LG does plenty to justify its prohibitive asking price. It's the TV your overdraft was made for.

● LG OLED55C6V £3000 ★★★★★



PICTURE QUALITY Maxed out

Mad Max's eyeball-exploding colours are a visceral assault in 4K Blu-ray, while this LG's HDR chops ensure George Miller's feast of dust and fire takes place on a supremely natural-looking palette. The clean picture is a real stickler for detail, too — sharply etched and unshakeably stable. And its excellent viewing angles won't punish anyone who's ceded their central spot on the sofa to get the nachos either. HD upscaling is perfectly watchable with everything we throw at it — yes, even an '80s *Only Fools And Horses* episode.



SOUND Big-toned

LG has paired up with audio specialists Harman Kardon to make the C6 sound fuller-bodied than its profile suggests. While you're still best off adding a soundbar or surround setup, there's no shortage of clarity, detail or volume here.



OS AND APPS Magnified performance

LG's new WebOS 3.0 is just as slick as before, and adds some handy new features. Magic Zoom allows you to magnify anything on the screen, while Magic Mobile Connection lets you beam content to the TV from a smartphone.



DESIGN Art de la TV stand

You know how everyone wouldn't stop gushing about *Breaking Bad* two years ago? Meeting anyone with a 4K OLED TV is a bit like that, minus the plot spoilers. Aside from their great picture quality, these sets are impossibly thin. The C6's svelte frame is slimmer than some smartphones, while even its protruding power pack is slimline to an extent that Schweppes would be proud of. Compared to the era of boxy CRT TVs, this LG may as well be a Picasso. And it's curved too, which further adds to its overall *je ne sais quoi*.



WebOS 3.0 is like the class boffin who's returned to school after spending the summer at an academic camp: it's evolved into an even bigger smarty-pants.

1 WHAT TO WATCH

Life Of Pi 4K Blu-ray

Ang Lee won an Oscar for his direction of this extraordinary film about a boy stranded on a lifeboat with only a zebra, an orangutan, a hyena and a huge Bengal tiger named Richard Parker for company.

The incredible visual effects of the CGI animals and terrifying weather are enhanced in 4K, which adds to the sense of exposure, powerlessness and isolation of the teenage protagonist. As unlikely as the scenario is, this is an unmissable film.



There's a greater focus on recommended content in WebOS 3.0 too, with plenty to entertain you, including BBC iPlayer, Demand5, Amazon, Netflix and Google Play.

2
WHAT TO
WATCH

Breaking Bad Netflix

Yes, *Breaking Bad* had some memorable supporting characters – Los Pollos Hermanos kingpin Gus Fring, psychopath Tuco Salamanca and, of course, Saul Goodman. But its other star is Albuquerque, shot beautifully on 35mm film and the main reason why the series has the look of a modern spaghetti western. The money saved by shooting in New Mexico went into its visual production – in 4K it bursts from your screen like a chemical explosion.

ON THE
OTHER
HAND...



DEPARTMENT SCORE
John Lewis 55JL9100
£700 / johnlewis.com

No longer content with its own futons and incomprehensibly expensive lampshades, last year saw John Lewis dive into the world of TVs – with surprisingly good results. Of course, it didn't craft this 55in 4K affair all on its lonesome.

In essence, the JL9100 is a bottom-tier LG with a JL logo slapped on it. With the influx of new models this HDR-less set has dropped in price by £200 and it may well be cheaper still by the time this mag meets your fond embrace.

While you'll get a pretty good picture here, it's not on the same level as what's offered by the latest models we've tested. Colours pop and there's a pleasing amount of sharpness to the John Lewis, but it's still a whole league beneath the high-end competition. You don't get nearly the same level of subtlety and contrast needed for a truly convincing image – there's not enough attention to shading, which affects the sense of depth.

Still, this LED set is a steal by any standards.

STUFF SAYS ★★★★★
Cheap but very capable, this is a fine 4K TV for those on a budget



The Lego Movie Amazon / 4K Blu-ray

"Everything is awesome! / Everything is cool when it's in Ultra HD!" OK, that's not quite how *The Lego Movie's* theme song goes, but this bricky classic looks even better when you quadruple the pixels. Emmet looks radiant in yellow, while Batman's suit is as dark as his ultra-serious demeanor. Forget those super-serious superhero romps – if you want a film to show off just how vibrant 4K can be, pick up this bombastic ode to imagination.

3
WHAT TO WATCH

ON THE OTHER HAND...



ALL SHOW BUSINESS

Panasonic TX-50CS520
£530 / panasonic.com

A great big HD TV that's going cheap, the CS520 makes up for what it lacks in charisma with a note-perfect pictorial performance.

You can tell this thing means business just by looking at it. It's a no-nonsense design: slim and simple, with no curves or anything so fancy. It just wants to stand there – with hardly any wobbling because that stand is serious – and make your 1080p pictures proud. Picture quality is such a priority that Panasonic hasn't even messed with the My Home Screen interface, which now dates back to 2013. Still, plug a PS4 or Apple TV into this thing and that'll hardly matter.

What's important is how it fares with your favourite shows. It does a stellar job. Contrast is superb, deftly juggling bright and dark scenery. Colours look great too. You're lavished with a rich palette that's vivid enough to grab your attention without looking processed or exaggerated. In absolute terms it may not be the most true to life, but it sure is pretty.

STUFF SAYS ★★★★★

A singularly brilliant picture from a great value smart TV



The mullet of TVs: business up front, party in the back

You know how a TV works, right? It's got a big screen with speakers around its frame and a giant projector rig on its backside.

No, wait. That's only what you get with Philips' ingenious Ambilux tech, and we've got the brand new 65in model right here.

A 4K extravaganza with HDR compatibility, this a seriously premium screen that you'll find

selling at Harrod's for a cool £4000. But if you've spotted one of Philips' Ambilight TVs over the last decade then you'll know the deal and how gurn-inducingly brilliant it is.

The idea here is to create a more immersive experience by extending the picture, and Ambilux turns the concept up way past 11 with nine tiny projectors that display the actual image of the

screen on the wall behind the TV. The effect can be distracting at first, but you'll quickly fall head over heels for its immersive knack for motion and detail.

Alas, not everything about the 65PUS8901 is as enthralling as its Ambilux abilities. It's a good screen, but its motion, backlighting and subtlety issues mark it down, especially when rival screens offer

a far more detailed and accurate picture. It's also worth noting that HDR is only being added to the set as an update later this year, which is disappointing for such an expensive piece of kit.

So while the 65PUS8901 boasts an undeniably brilliant gimmick in Ambilux, its fundamentals aren't up to the same deliriously fun standard.

● PHILIPS 65PUS8901 £4000 ★★★★★

4 WHAT TO WATCH

Captain Phillips Amazon

Loosely based on events in 2009, when Somali pirates hijacked a US cargo ship, this thriller is now available in 4K. So you'll be able to see every sweaty pore on Tom Hanks' face as he attempts to negotiate with the hijackers and save his crew hidden below deck. You know the American hero will likely survive, but this is still an exercise in coping with stress. The tension zigzags throughout, so keep hold of your cushion.



It was only a couple of years ago that Freeview or satellite channels looked dismal on a 4K screen, but the 8901's upscaling from standard def telly is perfectly watchable.

Philips' remotes get a QWERTY keyboard at the back that makes typing in passwords and YouTube searches infinitely easier. The 8901's is so big you could fend off a burglar with it.



PICTURE QUALITY Bright delights

The 65PUS8901's picture is chock-full of colour. *The Lego Movie* is a juvenile joy, with bold yellows, vivid oranges and deep blues wondrously illustrating Emmet and the gang as they take on President Business. This clarity is even more evident during the searingly bright *Mad Max* in 4K Blu-ray.

Despite this, the 8901 does struggle with slow pans and fast-paced action sequences. Look hard and you'll see faint judders and hiccups around outlines, while dark scenes on the Philips don't have the same intensity as its rivals in this test.



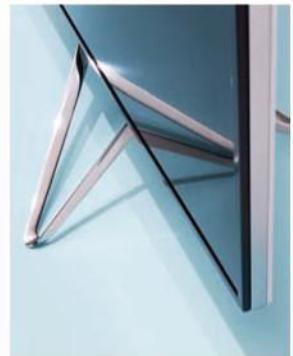
SOUND Talking points

Sound is one of this Philips's strong suits. Dialogue is clearly heard, and there are no tinny or harsh edges to set you on edge either. While this is all fine for watching *Countdown*, you'll want a meatier, more expansive sound to go with movies.



OS AND APPS Android affair

Philips' smart portal is powered by the simple if underwhelming Android TV. While its homepage is easy to zip around, it's far from dynamic. That said, Google Cast compatibility does at least allow you to fire video to it from your smartphone.



DESIGN Back, back up now...

For a TV that's guaranteed to dominate whichever room you place it in, the Philips is rather minimal in design. Nothing about this slim, well-built set should distract you from its 65in picture and accompanying Ambilux experience. Speaking of which, you're going to need to move some furniture.

Not only does the 8901 require a hefty bench to stand on, but also a large, blank wall behind to ensure its Ambilux lighting operates at full wow factor. Ideal placement is 24cm from the wall to ensure optimal focus and detail.



Quantum Dots make 4K fabulous for thrifty sofa slobs

Samsung has teetered on the brink of going OLED for the past few years, but its 2016 TVs remain #teamLCD through and through.

But, as per your average episode of *Mr Robot*, the KS7000 comes with a whopping plot twist.

You see, this set sprinkles a little extra stardust on top of its 4K and HDR brilliance in the form of 'Quantum Dot' technology. An

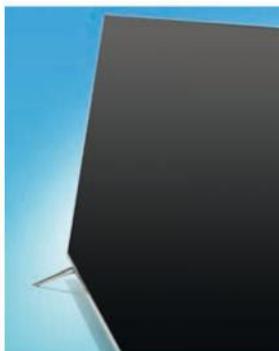
evolution of the nonsensical-sounding Nano Crystal tech we first saw last year, this innovation claims to offer over a billion colours to point your peepers at. Apparently, that's more than 64 times what 'conventional rivals' (aka non-OLEDs) offer, although we didn't take the time to count them all ourselves. The upshot is that the KS7000 qualifies for

a 'UHD Premium' sticker, so you won't have to upgrade again until at least the Qatar World Cup in 2022. Assuming it happens.

What'll impress most about the Samsung is its subtlety. There's enough definition when watching Netflix in 4K to count raindrops on a windscreen, plus the clarity to make out the accompanying condensation.

For a TV that's the junior member of Samsung's elite SUHD squad, this is some achievement. The KS7000 offers you top tech for significantly less than its 4K competition. With LG's entry-level OLED set priced at a whopping two grand, this set feels like a comparative bargain. Fidelity experts will notice the difference, but most of us will get by just fine.

● **SAMSUNG UE55KS7000 £1500** ★★★★★



PICTURE QUALITY Throwing shade

While the KS7000 doesn't have the bombastic impact of the LG C6, what you get is remarkable subtlety. Instead of retina-searing brightness and cosmic blacks, incremental shades of colour reign supreme. This finesse even stretches to the contours of chins and cheekbones, making *Spacey's* tilts to the camera in *House Of Cards* even more imposing.

And when you're without the 4K and HDR, this Samsung still proves to be an excellent upscaler. *Fargo's* austere snowscapes retain contrast and colour on HD Blu-ray.



SOUND Soft treatment

Just as *The Punisher* is a fine superhero let down by one bad habit (of murdering people), this Samsung's one obvious shortcoming is its sound. Even for a slim TV, it's not particularly substantial, leaving blockbuster viewing in need of oomph.



OS AND APPS Family Tizen

Last year, Samsung's Tizen-based OS was the distant cousin of LG's WebOS. Thankfully, 2016's incarnation is much more intuitive – thanks to a nice layout and handy shortcuts – and noticeably faster to boot.



DESIGN Fringe benefits

While it's not quite as stunning as the LG, this Samsung is still a real looker. That's largely thanks to its screw-less visage and 'Boundless' frame, which wraps a minuscule bezel around the TV's edge-lit LCD panel so that there's barely anything to distract you when looking at the screen. Adding to the set's svelte appeal is its lack of HDMI and USB inputs – they live separately in an external One Connect box.

Be warned if you don't have a huge bench for the Samsung; its feet don't allow you to adjust their wide positioning.



5 WHAT TO WATCH

MadMax Fury Road 4k Blu-ray

If ever a film was made for 4K (and HDR), it's *Mad Max: Fury Road*. Director George Miller takes what could've been a bland desert and throws in splashes of colour like cinematic fireworks, with intricate detail in the characters' grotesque masks and nightmarish vehicles.

The plot might be simpler than a sloth's to-do list but the incredible stunts make it a 4K journey that's well worth hitching a ride on.



Bad news if you've built a 3D Blu-ray collection: Samsung's decided to kill off the feature in the KS7000, so there'll be nothing leaping out at you from this screen.

Samsung's latest smart remote control has been redesigned, but still retains its traditional shortcoming of being a little on the simplistic side.



6
WHAT TO WATCH

Daredevil Netflix

No doubt you already know that *Daredevil* is one of the best things Marvel has created since its cinematic universe first came to fruition. Brooding, bold and bloody, it sees blind lawyer/asskicker Matt Murdock attempt to cleanse the crime-ridden streets of Hell's Kitchen while battling his own demons. This visceral spectacular is dark in visuals as well as tone, so the added resolution in 4K makes for better-defined fight scenes in near-blackout locations.

ON THE OTHER HAND...



HD WILL ROCK YOU

Samsung UE48J6300
£450 / samsung.com

If you really want a new set but are struggling to rustle up the funds, then this Samsung is worth checking out.

The downside? It's only an HD model, so it'll be outdated in a couple of years once Sky's 4K service is up and running and the Beeb gets on the same bandwagon. In the meantime, there are the Olympics and Euros to enjoy in HD.

The J6300 delivers sharp images with crisp, delicately defined textures and none of the artificial sharpening artefacts you get with lesser TVs. Elsewhere, colours have the right balance of vividness and subtlety, while contrast is spot-on. This Samsung can go properly bright and dim, and at both extremes there's a good deal of detail.

Spending less doesn't mean you have to 'just make do' here, although you'll have to be quick. It was made last year, so stocks of this J6300 are dwindling fast. But with some quickfire mouse clicks and a bit of luck, you'll feel as cheery as Kimmy Schmidt in a Christmas store.

STUFF SAYS ★★★★★

Eye-catching in every respect, this is a smart TV bargain

House Of Cards Netflix

Kevin Spacey isn't necessarily a person you'd want to see in ultra-detailed 4K, but at this resolution you can see every little bit of the ruthless cunning and inner rage portrayed on his face. The series' cinematography has always been excellent, and in 4K everything from the lush innards of the Oval Office to the grimy subway platforms running beneath Washington DC looks stunning. Watch it for the gripping story, and stay for the soul-piercing #SpaceySoliloquies.

7
WHAT TO WATCH

ON THE OTHER HAND...



PIXEL-PACKING

Samsung UE40JU6400
£500 / samsung.com

Some say 4K is pointless on smaller screens, but we disagree. Cramming 8.3 million pixels into a 40in display does wonders for clarity. It also means you can sit further back without squinting in consternation like Don Draper when the bar runs dry.

Colours are convincing and contrast is strong with upscaled Blu-ray footage. There's enough detail in the shadows to make out the grease on Keanu Reeves' hair in *John Wick*, but dark scenes never get properly black. Still, the dynamism is impressive for an LCD TV.

Considering the quality on offer it would be churlish to quibble with this Samsung's lack of 3D, HDR or curves – especially when it comes with Samsung's Tizen interface, which lets you skip between apps and inputs as easily as you'd change channels. That said, navigation is a little slow for a quad-core processor. But when the worst you can say is that it could use a double espresso now and again, you have to doff your cap.

STUFF SAYS ★★★★★☆

For £500, this is rather impressive. And did we mention it does 4K?



A bigger screen and a bigger bang for your UHD buck

A few years ago, Panasonic was the TV kingpin. Its plasma tech swatted the competition like incompetent underlings against an SUV door, for it was mighty. But then plasma production halted and Panasonic focused on LCD TVs, losing its mojo in the process.

But that wasn't the end, and Panasonic has been working hard, regaining momentum and working

on a big comeback. Is this the year that sees it back at the top? Time for a training montage...

On paper, it certainly looks like Panasonic has what it takes. The TX-65DX750 sits near the bottom of its top tier, where you get some of the fancy features without paying fancy money. You get 4K resolution (3840x2160), so that means about 8.3 million pixels

with HDR for extra brightness, contrast and dynamism.

Alas, not all 4K HDR TVs are created equal, and this one has not been deemed worthy of UHD Premium certification. In culinary terms, this is a bit like settling for sirloin steak instead of a fillet cut. You're still going to be treated to a visual feast, even though the DX750 falls short of

the supercharged levels of peak brightness and colour bit depth that you'll find elsewhere. Crucially, this Panasonic will handle all your current 4K needs without breaking a sweat.

If you want a big UHD telly that won't decimate your savings, then this 65-incher is a tempting option. For such a gargantuan set, its design is really rather fetching.

● PANASONIC TX-65DX750 £2000 ★★★★★

8 WHAT TO WATCH

The DX750 also boasts 3D (if you can still call it a boast), so your compatible Blu-rays can find refuge in this set. You'll still have to pay extra for those silly specs, mind.

Ghostbusters Amazon

Ignore the idiot misogynists on the internet: the new *Ghostbusters* is going to be great. But it'll still have to go some to top the original. It's an everyday tale of paranormal experts/losers who set up a ghost-extermination service in NYC just as the city finds itself in the grip of a supernatural invasion.

It's 32 years old, but its charms aren't diminished and it looks better than ever in 4K.



Some of the fancier TVs give you two remotes, typically one with voice operation or motion tracking. This one doesn't. But that means one less thing to lose to the god of cushions.



PICTURE QUALITY Dark matters

The main reason everyone used to (and continues to) bang on about plasma is its ability to go properly dark. After all, it's hard to take Batman seriously when he's as grey as a pavement. Here, the dark bits of every scene offer a genuine absence of light. It goes nicely with rich colours and a natural sharpness that doesn't look processed.

Sadly, in chasing the deepest blacks, Panasonic has sacrificed the fine increments of shade needed to make out what lurks in the shadows. In scenes that juggle bright lights with shadow, you lose out on detail.



DESIGN Fancy footwork

Panasonic has come up with the snappily named 'Switch Design'. This means the feet can be moved so they're wide apart or close together.

In this way, Panasonic caters for those with showroom-style TV benches, and normal people too. It's one of the best things that Sony did in 2015, and it's a good thing for Panasonic to, er, be inspired by.

In either configuration, the TV is reasonably stable. This 65in model has straight feet but the smaller models in the range stand on what appear to be tiny scythes.



SOUND Loud and proud

TVs tend to sound worse the slimmer they get, but the DX750 fares well. It has no problems getting loud, the top end isn't harsh, and the midrange is open. There's little bass to speak of, but there's just enough to do for occasional movie viewing.



The winner is... LG OLED55C6V



OK, we'll admit it. For a brief second we were tempted to go for the

Samsung here. Not only is it a phenomenal 4K TV, but it also offers sensational value for money. Then, we put all semblance of logic aside and went for the TV that our heart pines for and our wallet fears more than the one who knocks.

Granted, LG's latest OLED costs twice as much as the Samsung, but it's also a clear cut above the 4K fray. LG's mighty OLED features both sublime picture quality and design, while at the same time being future-proofed to the very hilt. The LG C6 needn't worry too much about what's next for TV tech, though. After all, it's set the bar – now everyone else has to jump higher.



+ Now add these

1 Panasonic DMP-UB900

UHD Blu-ray is the future of home cinema. Not all 4K is the same, and what this player offers is a running leap over what Netflix and Amazon have to offer at the moment. If you care how your movies look, this is the way to go. [£600 / panasonic.com](#)

2 Dali Kubik One

A fittingly premium soundbar for an opulent TV. Whether it's a talky episode of *True Detective* or the explosive *Agents Of S.H.I.E.L.D.*, the scale of sound is immense. There's ample low-end heft, and plenty of nuance. [£800 / dali-speakers.com](#)

3 Sky Q

The latest incarnation of this service could change the way you watch TV, especially when 4K arrives. It's a considerably neater and, OK, more fluid experience than the archaic multiroom option that Sky was offering before. [from £45/month / sky.com](#)

THE SUMMARY

● LG ● Philips ● Samsung ● Panasonic

PICTURE QUALITY

10 9 8 7 6 5 4 3 2 1

DESIGN

10 9 8 7 6 5 4 3 2 1

TECH RATER

SOUND

10 9 8 7 6 5 4 3 2 1

OS AND APPS

10 9 8 7 6 5 4 3 2 1

BEST OF THE BUDGET SETS



4K FOR THE FUTURE

John Lewis 55JL9100
£700 / johnlewis.com

There's a lot to be said for thrift, but while prices are so low right now, you're best off spending that extra couple of hundred quid. It'll go a lot further than at Christmas, when the latest models have replaced their elders.

Bearing that in mind, John Lewis's 55in 4K model is the pick of this supertest's affordable cabal. Not only does it offer UHD TV on a genuinely big screen; it also delivers on this promise with aplomb. LG's considerable hand in its design ensures it's a product with prestige.

So while there are some astounding HD TV bargains, those are the last of a dying breed. In just a couple of years' time, owning a TV that doesn't do 4K will seem as old-fashioned as the residents of Downton Abbey.

		Screen	OS	Inputs	Freeview	3D	Dimensions
	LG OLED55C6V LG has set the 4K standard with its OLED TVs and that trend shows no sign of abating with the C6. The quality this ultra-thin tech can achieve is phenomenal. That's why it's no.1. £3000 / lg.com	55in OLED, 3840x2160	WebOS 3.0	HDMI x3, USB x3	Yes	Yes	76x123 x19cm, 16.5kg
	Samsung UE55KS7000 There really is a great deal to recommend the KS7000. If this set represents the top of your budget then you'll still end up with a 4K TV that pound for pound is one of the best around. £1500 / samsung.com	55in LED, 3840x2160	Tizen	HDMI x4, USB x3	Yes	No	71x122.5 x4.4cm, 17.2kg
	Panasonic TX-65DX750 This Panasonic does a lot right, while giving you plenty of screen to luxuriate in. Compared to the TVs here from Samsung and LG, though, its performance isn't quite up to par. £2000 / panasonic.com	65in LED, 3840x2160	Firefox OS	HDMI x4, USB x4	Yes	Yes	83.8x145.3 x6.1cm, 26kg
	Philips 65PUS8901 This TV's Ambilux lighting really is sensational, but it's let down by several picture quality niggles and a price tag that demands near-on perfection. Plus, you'll have to wait for HDR. £4000 / philips.co.uk	65in LED, 3840x2160	Android TV	HDMI x4, USB x3	Yes	No	83x145 x4.2cm, 24kg



A native 4K resolution is a big ask, but expect a resolution bump above 1080p and a 60fps frame rate, while existing PS4 games should run more smoothly.



Don't forget PlayStation VR either. Sony's answer to the Oculus Rift and HTC Vive will offer a more immersive feel thanks to the additional power of the PS4K.



The PS4K's price depends on how much new tech Sony is cramming into it. If it's opting for increased, faster RAM and a new processing unit, it'll be around the £350 mark.

What's next for 4K?

The lowdown on Sony's new PlayStation and future UHD plans

PlayStation 4K

[Eftba / playstation.com](#)

It seems mad to suggest that Sony is about to unveil a new console only three years after the launch of the PlayStation 4, but that's exactly what it seems the Japanese tech giant is doing.

At the time of writing, so much has already leaked about the 'PlayStation 4K' that it seems a certainty to be announced at the E3 trade show in Los Angeles this month.

OK, so technically we're not actually talking about a next-gen console here – but if the rumours are true, the upcoming PS4K will offer more than just a slimmer build and an all-new price tag. The real meat on this machine's bones looks set to be its extra power, delivered by a new AMD

processor in order to serve up smooth 4K experiences.

Before you start fantasising about blowing up aliens in glorious 4K 60fps, however, it's extremely unlikely that we'll be seeing any games running at those specs. As we understand it, no games will be exclusively made for the PS4K, but a clutch of high-end titles will have added graphical flourishes to take advantage of the tech.

The '4K' in PS4K will therefore more than likely be aimed at video smart's – namely a built-in 4K Blu-ray player, and support for 4K streaming services such as Netflix and Amazon Prime Video. That also means HDMI 2.0 is on the cards, as well as HDR support. So if you're a gamer, now's certainly the time to be investing in a compatible TV.



Sky's 4K summer

Sky is keeping tight-lipped about its 4K plans, but they'll emerge this summer. Sky Q's Silver box is UHD-ready with a built-in tuner, but most of its 4K content will be on-demand via services like Netflix and Amazon Prime.



Virgin's UHD effort

With Sky and BT already in the 4K game, Virgin Media is about to enter the arena. Expect an updated set-top device to debut later this year after its existing TiVO service has been treated to a fresh, slicker menu system, à la Netflix.



Samsung's 'bargain' Blu-ray

Panasonic may have released the first 4K Blu-ray player, but Samsung's UBD-K8500 might just have the edge. Why? It's £430, while the Panasonic costs £600. Read our expert verdict in next month's mag.

LG G5

with LG Friends

life's good
when you
play more



Find out more at:
lg.com/uk/lg-friends



Pink-rememental gains

Last year's MacBook debuted with an extravaganza worthy of a Kardashian wedding; this one just gets a mention in the Apple newsletter. What's new?

from £1050 / apple.co.uk

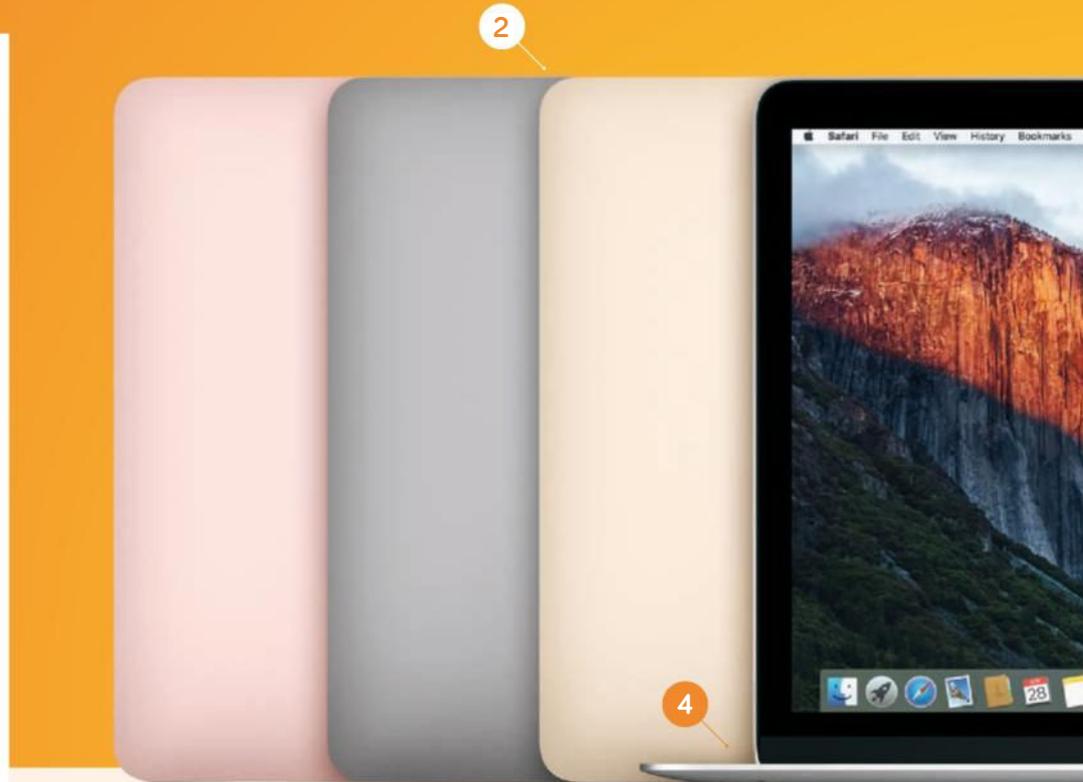
Last year Apple reinvented the laptop with the 12-inch MacBook. Despite its infuriating lack of ports, it was pretty darned brilliant.

The most important change to this year's MacBook can be summed up in one word: pink. Apple now makes a MacBook in rose gold.

I think this must be the only pink laptop I'd be happy to own. Like the iPhone and iPad rose gold, it's a subtle pink, not the day-glo shade that might earn disgusted looks on the train.

It almost seems pointless to tell you about how well made the MacBook is. As we've said in nearly every review since MacBooks began, it's a lovely all-aluminium thing. One day there'll probably be one of these propped up in the Design Museum next to a Philippe Starck chair. If there isn't already.

At 13mm thick and 920g, it almost feels as though you could fit the thing in your back pocket (pro tip: you can't). But what is the 2016 incarnation like to use?



1 Speakers corner

The MacBook has fantastic speakers for a laptop this small and thin. I've used hulking 5kg gaming machines that splash hi-fi brands across their front but don't sound as good as this. I'll still take a Bose Soundlink Mini II on holiday, but it's impressive stuff.

2 Track and feel

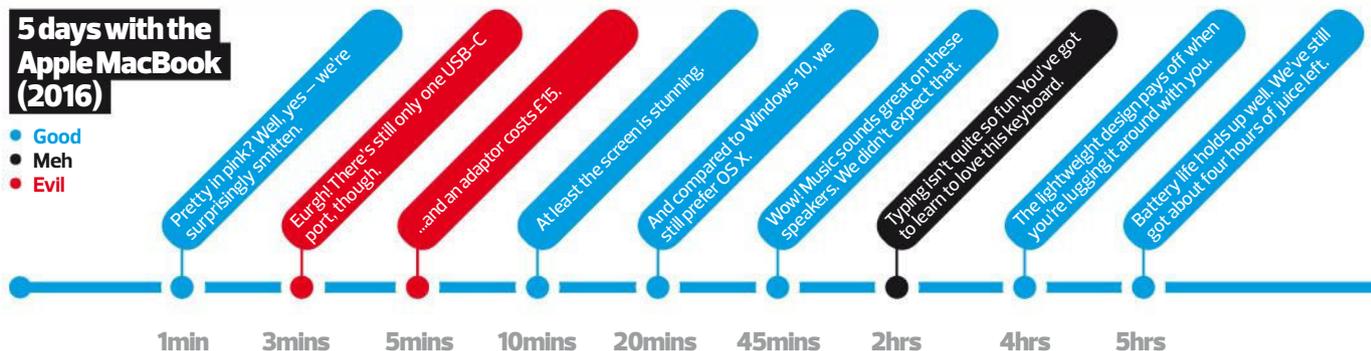
Small laptops can feel cramped. Not here. Size-wise the MacBook doesn't feel radically different to the MacBook Pro 13in I use day to day. Everything's squeezed in a little, but not much. The trackpad is still huge, with Force Touch tricks and that lovely glass surface.

3 Keys to success

The first sour note is the key feel. It's very crisp but the wafer-thin keys take a while to get used to. We're adaptable creatures, though, and Apple's butterfly key mechanism makes the buttons feel far surer than ordinary ones would with this tiny bit of travel.

5 days with the Apple MacBook (2016)

- Good
- Meh
- Evil



It might not get your pulse racing, but Apple's pretty proud of its new thin 'butterfly' key mechanism.



3

4 Plug-in crazy

Like 2015's MacBook, this one has a single USB-C socket, used to both charge the battery and connect accessories. There's still a 3.5mm jack, but no memory card slot. You don't even get a single USB-C-to-USB converter. That's a £15 accessory.

5 Battery battering

Stamina in the first MacBook was good. This one's better. I tried, and failed, to drain it down in a single day's ordinary work use. An hour's video playback took 12% off the battery, suggesting you'll get around 8.5 hours from a full charge.

Tech specs

- Display** 12in LED, 2034x1440 (226ppi)
- Processor** Intel 1GHz Core M3/1.2GHz Core M5
- RAM** 8GB **Storage** 256/512GB SSD
- Graphics** Intel HD Graphics 515 **Camera** 480p
- Connectivity** USB-C, 3.5mm jack, Wi-Fi, Bluetooth
- Dimensions** 28x19.7x1.3cm, 920g

Upgrade-itis?

If you already have a 2015 MacBook, this might not be for you. Not that there haven't been improvements...



■ Chips in

This generation uses a Skylake Core M processor, which is faster and more efficient. But I don't think you're going to notice all that much of a difference; performance is about 10% better this time.



■ Rev the engine

The SSD and 8GB RAM have a big hand in the overall speed. Where the old MacBook storage revs up to 500MB/s, this one writes at 650MB/s and reads at 850MB/s. It's a joy to use.



■ Gamer-gate

It's not great for gaming, though. The Intel HD 515 is marginally snappier than last year, but it's still going to be the last team member picked. It's outclassed by MacBook Airs and 13in Pros.



■ Shiny, happy laptop

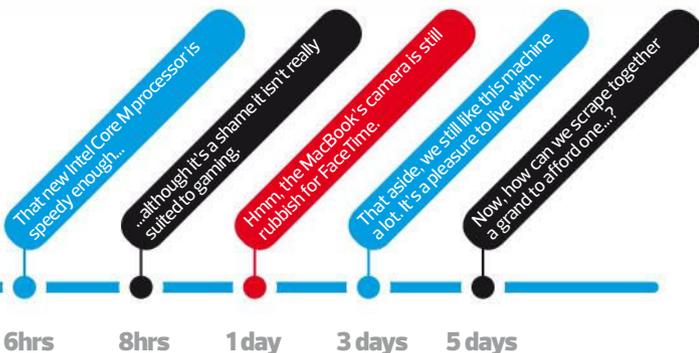
As a roving work machine to use everywhere, I'd rather take this than an iPad Pro, a Microsoft Surface Book or a Samsung TabPro S. The MacBook proves there's life in the old laptop yet.



Apple played so many of its design cards last year that this year's MacBook looks and feels largely identical. It's skinny and fab to use, and has a lovely screen. However, one USB-C does restrict its flexibility. Bargain hunters would do better to check out Apple's first-gen MacBook refurbs. @wwwdotandrew

STUFF SAYS ★★★★★

Two pounds of pink aside, it's much like last year's 12in MacBook – and that's no bad thing



Panasonic

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VANJA ČERNJUL, ASC
DIRECTS 'CONVERGING BEAMS'

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See Vanja's short film in-store to truly appreciate the 4K HDR difference, or see his take on HDR at panasonic.co.uk/4KPro



Crash & gurn

Capture your sporting life with one of these tiny rugged video cameras



**BEST FOR...
VALUE
HUNTERS**

Charge ambitions

The K-2 Pro has a removable battery, so swapping it for a spare is simple. One battery should last you three hours, though.

Veho Muvi K-2 Pro £280 / veho-muvi.com

What's the story?

The K-2 Pro is Veho's attempt to offer a GoPro Hero4 Black-rivalling camera at a lower price. It's a similar shape, it uses the same mounts and it too records video at 4K and 2.7K (with 12MP stills). However, 4K only records at 15fps, which is akin to a slideshow.

It does beat the GoPro in one respect: it has an LCD touchscreen so it's easy to change settings and compose shots. You won't have to link up to a phone or tablet via Wi-Fi, though with the Muvi app you've got the option – and its Wi-Fi works to about 60m.

Is it any good?

Footage and stills are far better than the Panasonic over the page, with 1080p clips benefitting from the frame-rate jump to 60fps and the stills cleaner and sharper, with better colour reproduction.

The videos are a touch flat and washed out by default, particularly when the lighting isn't great, but that's something that can be fixed by colour correction later. Those 15fps 4K clips are too just choppy to be truly enjoyable, but 2.7K footage (at 30fps) is usable and impressively detailed.

The mounting options in the box (tripod, helmet and stick-on), and the fact that this camera will work with any GoPro mounts you already have, mean it may not require much extra investment – but if you plan to take it on any truly testing adventures, investing in the waterproof case (see right) is a must.

Tech specs

Video 4K @ 15fps, 2.7K @ 30fps, 1080p @ 60fps, 720p @ 120fps
Stills 12MP **Display** Touch LCD
Wi-Fi Yes **Storage** MicroSD
Dimensions 60x40x23mm, 84g



IN CASE OF IMMERSION...

Veho makes no specific claims about the extent of the K-2 Pro's ruggedness, but it comes with a "weather resistant" silicone case, and can be equipped with a waterproof-to-100m case (£35) that will also happily shrug off dirt and drops.

STUFF SAYS A tempting price and screen, but video isn't up to GoPro standard ★★★★★



Batten down the hatches

The Panasonic's card slot and USB charging port sit behind a screw-off cover, which includes a seal to prevent water getting inside.

BEST FOR...
CYCLISTS

Panasonic HX-A1M £150 / panasonic.com

What's the story?

As befits the most affordable camera here, the Panasonic keeps things simple – no 4K, only a handful of settings and just three buttons on its body. Its streamlined shape and light weight make it more suited to helmet use than the others.

It's not for the most extreme sportspeople, being waterproof only to 1.5m – and there's no case to improve this. It supports microSD cards of up to 128GB capacity, which should store over 1000 hours of its top-quality video (1080p @ 30fps).

Is it any good?

In decent lighting, the HX-A1M produces pretty decent videos – not up to the lofty standards of the Veho and GoPro, but then, it's much cheaper. The 1080p footage is a tad grainy, and can look slightly washed out. Sound quality is also average, with wind noise proving an issue even when moving at walking pace.

However, the wide angle lens means you can fit plenty in the frame, and overall, given the price, it's hard to be too critical of this camera. Still images are captured at only 2.66MP, and don't look

great – you'd do much better with your smartphone.

To properly control the HX-A1M, you'll really need a phone or tablet too. There isn't a remote, and Panasonic's mobile app, which connects to the camera via Wi-Fi, is the best way to adjust settings, check your shot composition and start/stop recording.

Tech specs

Video 1080p @ 30fps, 720p @ 60fps **Stills** 2.66MP
Display None **Wi-Fi** Yes
Storage MicroSD
Dimensions 26x26x83.1mm, 45g



MOUNT COUNT

A standard tripod mount and a 'Multi Mount' come in the box. The latter lets you stick the HX-A1M to helmets and flat surfaces, or backpack straps via a Velcro band. Bike, suction cup, harness and head mounts are sold separately.

STUFF SAYS Its small size and weight are great, but image quality is only good ★★★★★



Keep on running

The Hero4 Black's battery delivers around 1.5 hours of 1080p recording or 50 minutes of 4K recording – the Veho has better stamina.

BEST FOR...
PRO FOOTAGE

GoPro Hero4 Black Edition £410 / shop.gopro.com

What's the story?

GoPro has become the go-to for action cams, and this is its top model. Despite its tiny size, it's capable of recording 4K video at 30fps and 720p at 240fps (for silky slo-mo), as well as 12MP stills in bursts of up to 30fps.

In many ways it's like the Veho: both have removable batteries, use the same mounts and work underwater. There are differences, though: the GoPro's waterproof housing comes as standard; and it has no screen, so you'll want to use the (excellent) mobile app to frame shots and change settings.

Is it any good?

The image quality of the Hero4 Black goes a long way towards justifying the wallet-pounding price tag. Its auto-exposure is superb, meaning you can quickly zip from indoors to a bright area without lag. Colour saturation and detail are also strengths, and its low-light skills mean you can rely on it to deliver usable shots even when daylight starts to disappear.

It also packs in the high-bitrate Protune video mode – less compression than normal videos allows for more tweaking

and colour correction in post-production. That said, if you're not desperate for this kind of pro-friendly comprehensiveness, you'll likely be better off with a cheaper camera – maybe one of GoPro's alternative models like the Hero4 Silver (which has an LCD touchscreen), or one of the other models in this test.

Tech specs

Video 4K @ 30fps, 2.7K @ 60fps, 1080p @ 120fps, 720p @ 240fps
Stills 12MP **Display** None **Wi-Fi** Yes **Storage** MicroSD **Dimensions** 71.3x71.1x39mm, 152g (in housing)



MASSIVE ATTACK

GoPro has a huge range of mounts and accessories, so if you're already invested in the company's 'ecosystem' it may actually save you money to buy the Hero4 Black. However, it's worth noting that it won't play nice with older GoPro batteries.

STUFF SAYS The best here, but not everyone will require its expensive talents ★★★★★

0 to 150 mph in 42 years

Stuff visited car tinkerer extraordinaire Jonny Smith as he prepares to break the road-legal electric car speed record – in a 1974 Enfield 8000



Every car Jonny Smith owns has a story. His Dodge Charger has bullet holes in the boot (caused, he suspects, by somebody firing from the inside out); his Austin Allegro, a car widely considered to be one of the worst ever made, has been fitted with a 2.7-litre V6 engine; and even the emerald green

Insight he picks me up in is the most travelled example of Honda's first-gen hybrid in Europe. But his little yellow Enfield, aka Jonny's Flux Capacitor, has the best story of them all.

City slicker

As we pull up to Jonny's Lincolnshire home, I notice some clues that suggest there's more happening on this road than just horse riding and dog walking. Tyre marks scuff the Tarmac directly outside his gravel driveway, evidence of previous rides he's given in his Flux Capacitor (a *Back To The Future* reference that, if you don't get, you're probably reading the wrong magazine).

Where Doc Brown's Flux Capacitor was the secret behind his time-travelling DeLorean, Jonny's is a highly modified but still completely road-legal Enfield 8000 ECC, originally made on the Isle of

Wight in 1974. Back then it was intended to be a little city runaround (not unlike those reviewed from p38), developed in reaction to the oil crisis that briefly threatened to plunge the planet into a *Mad Max*-style battleground where fuel was rarer than yeti tears.

Designed by the man responsible for the jet-propelled Thrust2, a car that held the land speed record for 14 years, you might think the Enfield 8000 would be no stranger to going quickly. But with a 48-volt electric motor and eight 12v lead acid batteries to power it, the car's 0-60 time was a less than impressive, er, never – it had a top speed of 40mph. Considering it cost more than twice as much as an Austin Mini, it's not a huge surprise only 120 were made.

Jonny's specimen was the third to roll off the production line and came into his possession via a lady in Bristol, where it had been damaged by flooding on the banks of the river Avon. He convinced her to sell it for £1000 in 2012 and set to work turning it into a drag racer.

We need to torque

"When I brought it back my brother asked: 'Is that a real car or can you drive it on the pavement?'" Jonny tells me as



TECH SPEC

- Top speed 120mph (predicted max 150mph)
- 1/4-mile time 10.8 secs ● Range 30 miles approx
- Battery Lithium-ion ● Weight 850kg



M

M

The Enfield looks much the same as it always did on the outside. Inside, though, it's almost unrecognisable.



we stand in the garage admiring his diminutive dragster.

"I like that it looks so inappropriate for purpose," he says. "I fancied the idea of building an electric hot rod but wanted to use a car that had always been battery-powered, so I went back through the archives of time to find an electric car that nobody remembered. The original car was pretty amazing in terms of technology. It had a heated windscreen, which at the time was unheard of, and its own onboard charger in the boot that came out on a little rail so you didn't have to go to a special charge point."

The water had killed the car's innards but Jonny needed to rip its guts out and start again anyway. Out came the original 8hp electric motor and in went two 9in DC ones, connected together inside the old transmission tunnel and attached to a whacking great differential and a rear axle that could cope with the massive amount of power Jonny planned to feed through it.

The source of that power is unexpected to say the least. While it might not have a Flux Capacitor, Jonny's car does have its own Hyperdrive, in the shape of 144 lithium pouch-cell batteries sourced by a company of the same name in Sunderland. "What's so weird about Sunderland?" you're probably thinking, but that's not the strange part – it's what these batteries were originally intended for that's unusual. ▶

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OUR FRIENDS ELECTRIC

Lecca power's most rapid movers

● **Tesla P90D**
Tesla's Model S was already pretty nippy (the P85D managed a quarter-mile in 11.6 seconds) but the 'Ludicrous' mode on the P90D version of the Muskmobile cut that down to 10.9 – just a tenth of a second slower than the Flux Capacitor.

● **Lola Drayson B12/69 EV**
The current holder of the electric land speed

record: in 2013, Paul Drayson converted a car normally seen competing at Le Mans to battery power and hit an average speed of over 205mph. It also covered the quarter-mile in 9.7 seconds.

● **Black Current III**
A heavily modified VW Beetle run by pals of Jonny's, the Black Current III broke the 150mph mark on the way to recording a

quarter-mile time of 9.3 seconds last July. Not a car for doing the school run in.

● **White Zombie**
Owned and run by the pioneer of electric drag racing, John Wayland's 123mph Datsun is the current holder of the street-legal EV world record and the inspiration behind Jonny's Flux Capacitor. It also shares its name with an '80s metal band.

benchmark for decades," Jonny explains. "If you can run one under 12 seconds it's always classed as fast. If you can break 10 seconds, it's flipping fast.

"I started off wanting to use this car for a laugh but I've become genuinely attached to its history and what it stands for," he admits, replacing the bonnet. "I guess we should take it for a drive, shouldn't we?"

Take me home, country roads

Strapped into four-point racing harnesses, we trundle out onto the country roads surrounding Jonny's home. As the road straightens and Jonny gives it some beans, the Perspex windows rattle and the Enfield's two motors let out a whine that's a bit like a cross between a spaceship and a London Underground train. "As soon as the car went over 100mph on the drag strip I started losing side windows," he says. "I lost one at 108mph into a funfair. That's why they're bolted together now."

We're not doing anything close to that but it quickly becomes apparent that this isn't a Nissan Leaf or Renault Zoe. It's not soundproofed – it's not even fully waterproof – but its race tweaks, tiny

"This spec of battery is built for a Bell SuperCobra attack helicopter," Jonny says as he lifts the bonnet to reveal a bank of blinking lights – the car's battery management system. "They start the chopper's engines and run the mini-guns on the side," he adds with a grin. Beneath Perspex, the three battery packs look more like a server cluster than a power source for a car. "The retail price is US\$30,000 and they don't even look interesting," he reveals. "Underneath they look like posh sachets of Cup-a-Soup."

But what they look like isn't important. What you get is huge power that can be deployed quickly

without catching fire – and that bit is important. "When lithium goes up, it's not an explosion like fuel – the cell would essentially turn into lava," Jonny explains. "You know in *Alien* where their blood is like an acid that burns through anything? It's kind of like that."

The Enfield's new batteries make it about 100 times more powerful than the original: 600kW instead of 6kW, 800hp instead of 8hp. "Some calculations even say 1003hp," says Jonny, "but the torque is the real killer. When we've got it really wound up it's got pretty much double the torque of any Ferrari on sale now."

Drag king

The end result is a car that does zero to 121mph in 10.84 seconds – a European record for a street-legal EV. That's also faster than a Lamborghini Murcielago SV, a Pagani Huayra or a Ferrari Enzo.

"But hang on!" I hear you cry. "In its 'Ludicrous' mode Tesla's P90D is limited to 155mph and you just said this satsuma on wheels will only do 121mph. How can it be a record breaker?" While I suspect you've had to check that on Tesla's Wikipedia page, you're right.

However, stick that Model S on a straight bit of track, put your foot down and it'll pass the quarter-mile mark 10.9 seconds later. The Flux Capacitor will get there first. "In the real world the quarter-mile has been a good

"The battery cells cost \$30,000 and look like posh sachets of Cup-a-Soup"



It may not look (or feel) like it, but the Flux Cap ticks all the boxes for road use.



proportions (it's shorter than an old Fiat 500) and low ride height make it feel like being inside a homemade escape pod as it's fired from a doomed aircraft.

On public roads we obviously can't push it to its limits, but just accelerating up to 60mph you get a sense of how much faster it could go. The response is instant and feels never-ending, those Cup-a-Soup gunship batteries really going to work.

"There are very few cars that can come close to the feeling of this on hard throttle," says Jonny, his voice raised slightly over the noise of the wind and rattling suspension. "It's like being in a stretched catapult. If there's enough road it'll just keep pulling."

We don't have much road, so Jonny pulls into a lay-by to turn around. The modifications he's made mean the Enfield is happiest in a straight line, so much so that the rear end lets out pained groans when turning at slow speeds, like a sinking ship in a storm threatening to tear itself in two. He assures me it's nothing to worry about.

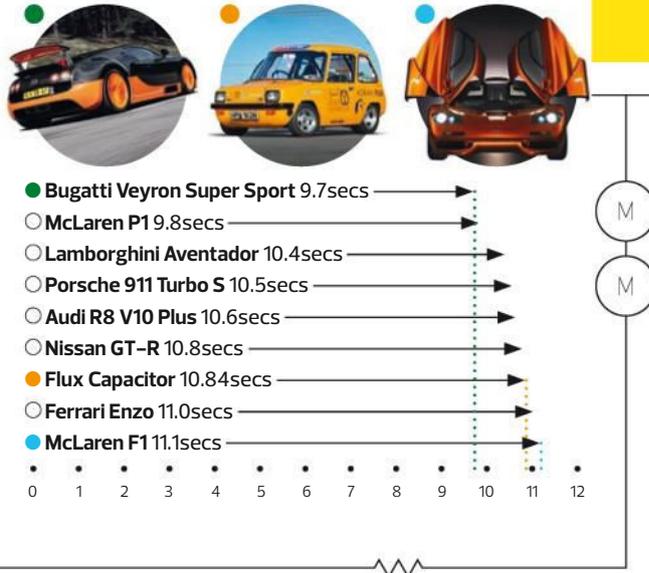
The road ahead is straight and clear, and on this cold day the back end does wriggle a little under acceleration. "It doesn't have all the electronic guardian angels that a lot of supercars have," Jonny points out. "It's a wake-up call every time I get in it, but when it breaks traction it doesn't do it violently."

If you wanna be a record breaker...

Back in Jonny's kitchen, the Enfield safely on charge in the garage, it strikes me that this car is the automotive equivalent of a puffer fish – a ridiculous animal that looks like something a child might draw but hides four large, powerful teeth in its mouth and a deadly poison within its internal organs. Behind the Flux Cap's friendly face is a pure hot rod. As if to prove my point, Jonny reveals he has a one of the toxic little blighters in an aquarium by his front door.

But to break the street-legal world record, the aluminium puffer fish in his

NO QUARTER GIVEN
How the Flux Capacitor measures up against the quarter-mile kings



garage needs to go even faster. The record is held by the White Zombie, a modified 1972 Datsun 1200 that did the quarter-mile in 10.25 seconds.

Jonny's Enfield broke the 100mph mark using just 1400 of the 2000 amps available to it, but to beat the White Zombie it'll need more oomph, which is why he's putting another battery pack in the boot that will bring the power up to 400 volts. "In its current state it'd probably hit 150mph but volts equal top speed and amps equal acceleration, so we should be able to power harder to the finish line. As a road car it also means we'd have better range."

Amid all this torque talk it's easy to forget that this is still a road car with insurance and an MOT. Jonny even took his daughter to school in it once. Before I leave, he recounts some scalps he's taken on the track – "I slapped an Audi A4 Touring Car, they weren't very happy about that" – and considers what he'd like to take on in the future. "I reckon I could beat a Formula E car to 60mph – maybe even to 100mph," he suggests. "The difference is I can drive to the fish'n'chip shop afterwards and they can't."

"It's like being in a stretched catapult. If there's enough road it'll just keep pulling"



With torque on tap, the Flux Cap has no problem lighting up the back tyres.

Aria 900

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Aria drivers feature a new Zamak (zinc/aluminum/magnesium/copper) basket and tweeters are suspended using Poron, a 'memory foam' material developed for the reference Utopia range which reduces distortion three-fold in critical areas of the audio spectrum.



Choice

Choose the compact bookshelf 906 or the floorstanding 926. Both are available in Walnut or Black High Gloss finishes with real leather front panels. Designed and manufactured in the heart of France.

Cheap, not cheerful

Canon's stripped things right back for its new budget DSLR – but has it compromised in the right places? We spent a few weeks with it finding out

£290 (body only) / canon.co.uk

● DAY 01

Can a DSLR ever replace a phone's camera for sheer immediacy? Canon thinks so, hence the 1300D: a super-cheap lens-swapper aimed squarely at smartphone-savvy Instagram addicts looking to level up. How do I know that's the target audience? Well, despite a spec that's so stripped back it might as well be naked, it arrives rocking NFC and Wi-Fi for easy uploading and a dedicated Food mode. QED.

It really is cheap, too – at £290 it costs less than any other new

super-light and I'm pleased to see dedicated buttons for the likes of ISO, white balance, autofocus and drive mode round the back.

What's missing? Well, the screen is neither flippable nor touch-sensitive. The latter seems like a glaring omission given the target audience, but I'm more bothered about the former – a swivelling screen has saved my bacon on many occasions. Given the price, I can see why they're not here, though.

Anyway, time to give it a whirl. The 1300D's combination of 18MP APS-C sensor and DIGIC 4+



This super-cheap lens-swapper is aimed squarely at smartphone-savvy Instagram addicts looking to level up

DSLR and not much more than plenty of compacts. But at that price, some compromises are inevitable.

For starters, it's plasticky: you'll find more metal on an American teenager's teeth. Nor is it a thing of beauty – set next to a charming retro snapper such as the Fujifilm X-T10 it looks dull, dull, dull.

On picking it up, though, I'm impressed: the 1300D is really nicely built, with a good, deep grip and plenty of controls where you need them. The fact that it's so plasticky means that it's also

processor should give it the chops to leave the average smartphone in the dust. And first impressions are positive.

It's the weekend, so I'm taking the kids to the pub as any responsible parent should. I snap away at the ducks in the garden and am swiftly impressed with the detail in the shots. Noise is well controlled right up to ISO 3200 and is barely visible at ISO 800, while the colours in the ducks' feathers really stand out. That said, this is no Galaxy S7, so you may still find them too muted (ie: realistic) for your tastes.





Tech specs

Sensor 18MP APS-C CMOS
Processor DIGIC 4+
ISO range 100–6400 (12,800 in extended mode)
Display 3in TFT, 920K-dots
Viewfinder Pentamirror, 0.8x magnification
AF points 9
Video 1080p @ 30fps
Connectivity Wi-Fi, NFC
Built-in flash? Yes
Dimensions 129x101x78mm, 485g



DAY 02

I'm in an Instagram kind of mood. In theory, hooking the 1300D up to my mobile should be a simple matter, but then in theory Boris Johnson should be a laughing stock. Connecting to Wi-Fi for the first time is the usual mix of error messages and timeouts until I bash it into my forehead repeatedly, which miraculously solves the problem.

In its defence, it links up pretty swiftly after that. NFC helps: one tap and I'm straight into Canon's Camera Connect app. And there the news gets better, because the app is one of the best I've used. I'm quickly viewing and downloading shots, and uploading them to Instagram is but a few clicks away. It also lets you control the camera for tripod-based fun.

DAY 08

So what's this 'Food mode', then? Turns out that, like all the custom modes (Landscape, Portrait, Sports etc), it just controls a few of the camera's settings – aperture, colour tone, shutter speed – to make things easy for you. It works well enough if you're a beginner but you'd be better off learning how to set these things yourself and taking full control.



DAY 15

I'm struggling a bit with autofocus. Whereas the next-step-up 750D gets a 19-point system, the 1300D has to make do with a 9-point setup. It's speedy in its comfort zone of static or slow-moving subjects, but give it a hyperactive cat and it's not so hot.

Live View and video are a much bigger problem. Almost every other recent Canon camera, including the 750D and the now-just-as-cheap 100D, get Canon's nifty hybrid CMOS AF focusing, a system so smart it could probably beat me at chess. That's absent here, so there's no automatic focusing in those modes. There are no 4K or 60fps options either.

DAY 19

A trip to London confirms that in the right conditions the 1300D can take better pics than any phone. I stick my beloved 50mm f/1.8 lens on the front (a bargain at £120) and I'm able to get shots with a lovely shallow depth-of-field that no smartphone could manage. My Instagram feed will be superb. But the fact remains that, unless Wi-Fi is a must, Canon's own 100D is better – and for a little more you could get the superb 750D. I'd save up a little and skip this one.

With only 9-point autofocus, locking in on fast-moving subjects with the 1300D can be problematic.



STUFF SAYS

It's cheap as chips and takes great photos but the 1300D's not quite the bargain it seems

★★★★☆

THE TV PICTURE BIGGER THAN THE SCREEN IT'S ON

Say 'halo' to Philips Ambilight. It's like surround-sound... for your eyes

The best demonstration of Ambilight you can get is to turn it off. Seriously. Because it's only then that you realise just how much of a difference Philips' TV technology really makes.

Ambilight adds another dimension to your viewing by shining light from LEDs on the back of the TV onto the wall behind it. These lights use the TV's internal processing to replicate the colours you're seeing on-screen in real time – which makes the picture appear to expand far beyond the bezel.

It reduces eye fatigue, immerses you more in the on-screen action and makes the screen appear larger than it really is.

And then you turn it off, and you really wish you hadn't. It's the sort of thing you only do once in a while, when you have skeptical friends over. (They don't stay skeptical for long.)

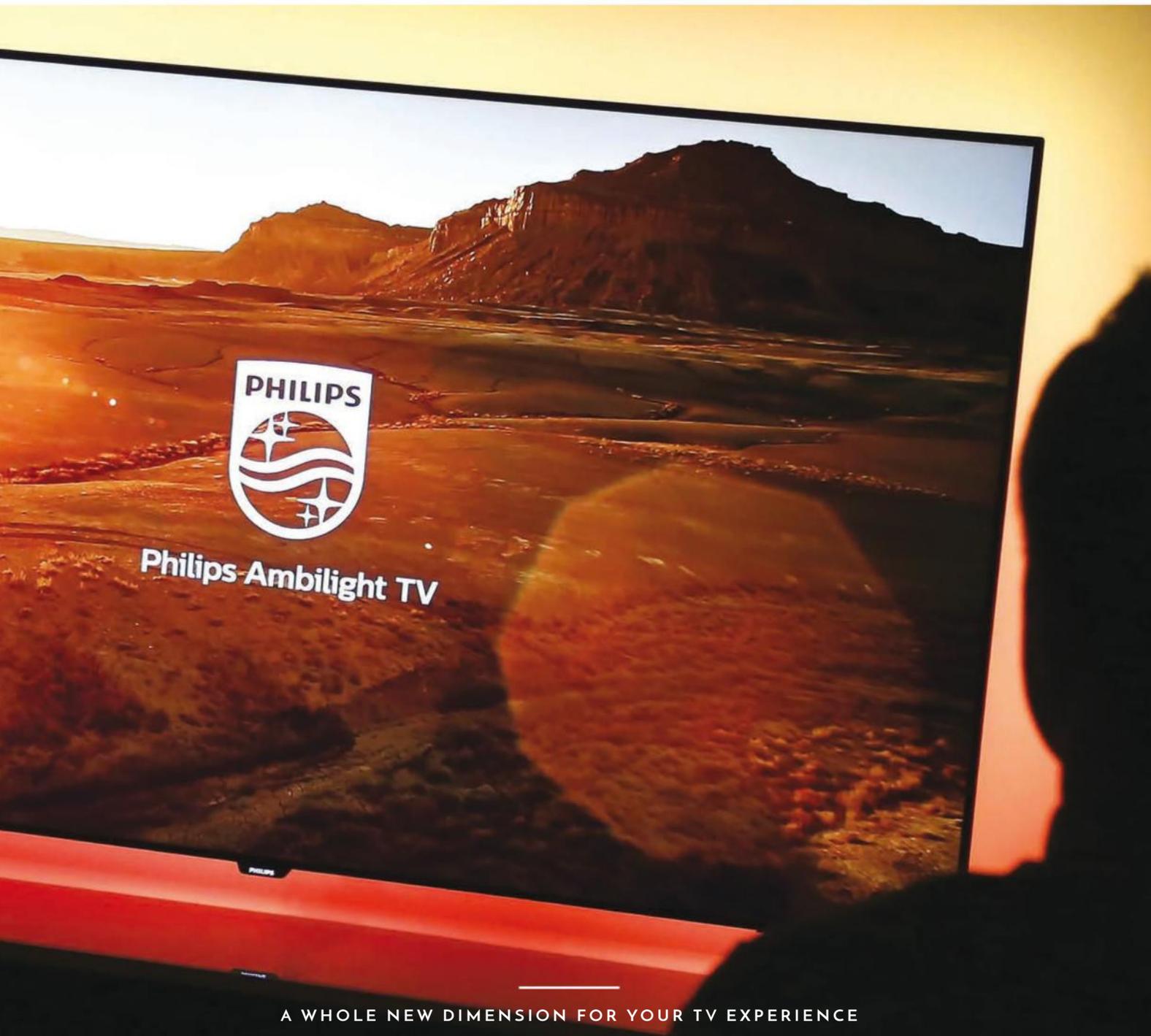
Ambilight comes in four flavours: two-sided (left and right), three-sided (left, right and top), four-sided (we'll let you guess that one for yourself) and the brand-new AmbiLux.

AmbiLux uses nine tiny DLP pico-projectors to take the concept to another level – actually reproducing part of the TV picture on the wall behind the set.

Whichever option you choose, it's all tweakable. Set the strength and halo-size of the effect, calibrate it to your wall colour, tell it to respond in a different way to different types of content, and more.

All Ambilight-equipped sets have Android on board for an instantly intuitive experience, and they're all powered by quad-core processors – so you can say goodbye to lag.

It's TV turned up to 11. Time to do your eyes – and your living-room wall – a favour.



A WHOLE NEW DIMENSION FOR YOUR TV EXPERIENCE



TV AND MOVIES

Dial in the effect to make your picture appear to escape the confines of the screen. It draws you in, makes the image appear truly huge and soon becomes part of your regular TV watching.



GAMING AND MUSIC

Bring the action to life in ways you never thought possible – making the whole room part of the fun. A music mode accurately tracks audio dynamics for amazing real-time visualisations.



AMBILUX

The new AmbiLux TVs use nine tiny projectors in place of LEDs to reproduce parts of the TV image on the wall. So, rather than swathes of colour, you get an amplified version of what's on screen.

Find out more about Philips Ambilight and AmbiLux at www.philips.co.uk/tv

Apple CarPlay

OS: in the driving seat?

It should come as no surprise that Apple's gone with a grid of square icons for its in-car homescreen, given that this has been the stylistic approach of its screens since the first iPhone in 2007. Irritatingly, though, you can't re-order the apps to put your favourite ones first.

With just eight icons on each 'page', prodding the one you're after is mighty simple even when doing 70mph on the M25 (should the M25 ever clear up enough to make 70mph possible). You get a notification when a text message comes in, and you can send and receive using dictation via Siri.

Fight of the navigators

Apple Maps really isn't that bad. Sure, it was something of a catastrophe in 2012, but it's

come on a lot since then. It even acknowledges the existence of Stratford-upon-Avon.

It's still not perfect, though, especially in CarPlay form. The white and grey colour palette works well on an iPhone screen, but some car screens lack the same level of contrast and that can make it a little hard to make sense of a road layout.

It also seems keen to shield you from any traffic-shaped bad news. In fact, the app's quite happy guiding you right into a nasty snarl-up, and that's no fun at all.

Entertain me

Apple CarPlay's audio options are very similar to Android Auto's, except for swapping Google Play for Apple Music, obviously. This works well on CarPlay, especially

with the 'For You' personal recommendations.

Those who organise their Spotify playlists in a cryptic folder arrangement will hit a point where nothing is displayed; but if you're someone who saves music to the default folders, the only issue is the need to scroll through long lists. The fact that Siri doesn't work with Spotify is a shame. Naturally there's also a bunch of radio and podcast apps, and while bugs appear, there are always other options available.

Apps Apple Maps ● Apple Music ● Audible ● Deezer ● Downcast ● Overcast ● Podcasts ● Spotify ● Rdio ● Stitcher ● Tuneln

Stuff says ★★★☆☆

CarPlay really needs a new sat-nav app... stat!



BEST APPS FOR APPLE CARPLAY

● Apple's own Podcasts app is fine, but Overcast is infinitely better. As well as being prettier to use, features such as Smart Speed and Voice Boost raise it above the competition.

● Staring down the barrel of an epic road trip? Screw podcasts – you need some audiobooks to keep you entertained. Part of the Amazon empire, Audible has millions of books available to make the miles fly by.

Clash of the dash:

Manufacturers now let you get a car-specific version of Android or iOS with their infotainment systems, but which will win the battle to reawesomise your automobile?



BEST APPS FOR ANDROID AUTO

● Both CarPlay and Android Auto offer SMS apps, but only the Android camp delivers WhatsApp. Tap a message to be read to you, and you can even dictate a reply. Winning!

● The most obvious choice of streaming for many will be Spotify, but it works so badly on Auto that you'll have to settle for Google's own music app if you want to rock out in a traffic jam.

Android Auto

OS: in the driving seat?

This is a far friendlier interface than the impassive grid of icons that CarPlay gives you, thanks mostly to customisable wallpaper, with five small icons arranged in a row at the bottom.

Keeping these icons out of the way means the main display can be used for notifications. At first plug-in you're told what the weather's like. Then Google Now will automatically use your driving habits, emails etc to try to guess where you're going and create a banner with distance and traffic details for that drive. Tap on that banner and Google Maps pops up, ready to guide you. It's lovely and slick.

Fight of the navigators

Google Maps has a couple of deficiencies compared to a

dedicated car navigator such as TomTom – it lacks a speed readout and camera locations, for instance – but it's a powerful mapping tool with very clear navigation instructions.

Unlike Apple Maps it also keeps you informed as traffic conditions change, marking them clearly on the map and in your updated ETA, and giving audio updates that include options to navigate around the traffic should a faster route appear.

Entertain me

You may not get a choice when it comes to sat-nav, but there are plenty of options when it comes to audio entertainment. The problem with Spotify is that the number of songs, artists, albums or folders you can see at any one time is limited "for safety

reasons". Tap on your Artists folder and you get access to only the first nine, which probably won't get you even a third of the way into A. The same problem rears its annoying head in Tuneln: tap to browse by location, select Europe, then scream at the screen when it tells you "no more items can be displayed".

Getting to the music you want is relatively painless using voice commands, but not being able to properly browse is a patronising pain in the backside.

Apps Google Maps ● Spotify ● Skype ● Tuneln ● WhatsApp ● Pocket Casts ● Stitcher ● Podcast Player ● 7digital

Stuff says ★★★☆☆

Some serious Spotify issues, but it's still better than CarPlay



Speak up
To activate Siri voice control for dictating messages or making calls on the move, just press and hold this white button. Eyes on the road!

Cast off
You can't re-order the apps, so Apple's Podcasts, for example, will always appear on the first page, while your favourite could be relegated to the third.

Apple vs Android



Nice 'n' clear
If you return to the homescreen during your drive, the top notification will always give you your next navigation instruction, plus messages below.

TEST WINNER

On the map
With all of the sat-nav apps available, Android Auto and CarPlay have just one apiece. The good news for Android Auto is that it's Google Maps.

Oasis: What's the story?

A jaw-droppingly expensive e-reader that's the ultimate bookworm's status symbol

from £270 / amazon.co.uk

■ Sasquatch, Godzilla, zombies... they're all about as terrifying as the Kindle Oasis's price tag. Get the Wi-Fi/3G version and it'll set you back a monstrous £330. The Wi-Fi-only version isn't much cheaper at £270, which is still a lot for something that shows your ebooks and graphic novels in black and white. Especially given the Kindle Paperwhite costs £160 less.

■ But let's assume that you love to read. I don't mean you roll deep with Tolstoy and Dostoevsky, just that you devour a tome a week. Then the Oasis is the best e-reader you can buy.

■ Its superiority revolves almost exclusively around its design. For something made of plastic polymer, the Oasis feel deluxe in the hand. The slight ridge on its back is easy to grip, even when you feel a 7pm nap coming on.

■ Every Oasis comes with a complimentary leather cover that's available in three colours: black, 'walnut' or 'merlot'. The cover also boosts the battery life from two weeks to nine – the longest of any Kindle.

■ However, the 6in touchscreen display isn't quite as fully featured as the one on the cheaper Voyage, which adapts to background conditions. Amazon argues that the Oasis's backlight is superior as it allows for stronger lighting and reduces the distance the light travels from edge to edge.

Tech specs

Screen 6in 1440x1080 (300ppi)
Touchscreen Yes **Backlight** Yes
Storage 4GB **Battery life** 9 weeks with cover, 2 weeks without
Dimensions 143x122x3.4–8.5mm, 131g without cover

The Oasis has pleasantly tactile buttons to turn pages, not pressure-sensitive tabs.



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Read for £0.00
 with Kindle Unlimited

OR

Buy now

Deliver to your Kindle or other device



Walking library

If your reading pace is akin to the spitfire flow of 2 Chainz, Amazon's Kindle Unlimited service should suffice. It offers you the choice of 700,000 books to peruse for £7.99/month.

Slim shady

At its thinnest point the Kindle Oasis is an astonishing 3.4mm slim, while its 131g weight (without a cover) means it's around a third less heavy than the 188g Paperwhite.

STUFF SAYS If you've got the cash to spare, this e-reader is the best you can buy ★★★★★

Buying one is the decadent option, but it never hurts to show your class

Robert Leedham



Let me be clear about this: if you're looking for an e-reader, then the Paperwhite will do just fine. It has a great screen and backlighting like the Oasis, and it costs less than half the price of this new Kindle. But don't come crying to me if Diana on the opposite sunlounger turns you as green as the mint in your mojito. Why? She'll be reading the latest trashy thriller on her Oasis, instead of the peasantry's e-reader of choice.

One-inch punch

Boasting 4K in a compact body, Panasonic's latest super-snapper is a traveller's delight

£550 / panasonic.co.uk



■ If you're off on your holidays, the Panasonic TZ100 might be your ideal companion. With a big 1in sensor, 10x optical zoom, RAW shooting and 4K video capabilities plus an electronic viewfinder all squeezed into a point-and-shoot body, this superzoom snapper is designed with portability and performance in mind.

■ The TZ100 is a thoughtfully constructed and well-designed camera. The body is smooth metal, but the lens barrel and small grip on the right side give you plenty of purchase. There's a lot of customisability with the controls and you'd barely notice it hanging around your neck.

■ The rear panel is dominated by a 3in touchscreen. There's also that electronic viewfinder, which is activated when you hold the camera up to your eye: great not only for composing shots but also for reviewing them later.

■ As a compact performer, it really is impressive. The TZ100 doesn't boast all the slo-mo tricks of the pricier Sony RX100 IV, but with a comparative sensor and zoom, it has a similar level of image quality for both stills and video.

■ The sensor's physical size aids low-light performance, so you can pull off reasonably sharp shots indoors and at night. The 4K video is eye-poppingly sharp, although the 25fps frame rate means there's a bit of flicker with motion.



■ 4K's the way

There's a handy 4K photo mode, which records 4K video clips then allows you to extract individual frames. These are only 8MP as opposed to the regular 20.1MP, but they still look fantastic.



■ Focus pocus

Another trick is post-focus, which also works in 8MP 4K resolution. You can get a subject looking nice and sharp while the background is blurry, or instead focus on a background object.

Tech specs

Sensor 1in 20.1MP CMOS **Lens** 10x zoom f/2.8-f/5.9 **ISO range** 80-25600 **Video** 4K @ 25fps, 1080p @ 100/50/25/24fps **Screen** 3in **Wi-Fi** Yes **NFC** No **Dimensions** 111x65x44.3mm, 310g

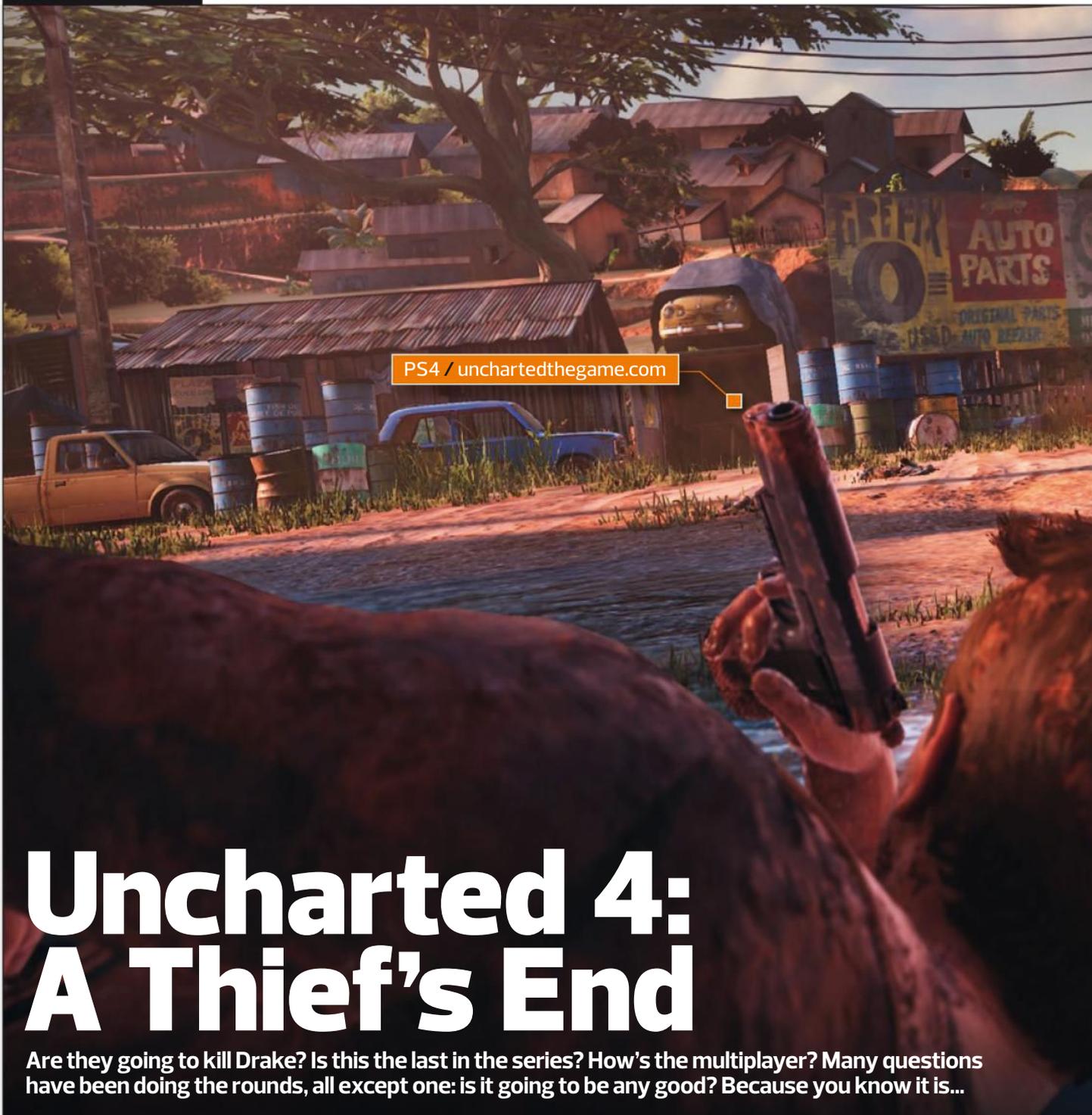
STUFF SAYS Flexible and reliable, this is a brill camera for those who travel light ★★★★★

The TZ100 is one of the finest compacts I've used

Sam Kiildsen



The TZ100 isn't cheap, with its £550 price tag pushing it into the territory of entry-level DSLRs and compact system cameras. However it's one of the best premium superzoom cameras around, delivering superb image quality, user-friendliness and versatility in a sturdy body. It won't better any interchangeable-lens camera for sharpness or detail, but it'll come pretty close – and crucially, it'll fit in your pocket.



Uncharted 4: A Thief's End

Are they going to kill Drake? Is this the last in the series? How's the multiplayer? Many questions have been doing the rounds, all except one: is it going to be any good? Because you know it is...

Such is Naughty Dog's record, the assumption has always been that *Uncharted 4* would be great. A tiny part of me wishes I could tell you it isn't, despite all the odds and the anticipation. Bad news on that front: it's ace.

That's not to say everything's perfect. The basic premise, that Drake is drawn out of retirement for one last job by his long-lost brother, is quite a cliché.

Thankfully, the gunplay here is more enjoyable than ever before

in the series. Combat feels faster and more fluid. It's always been possible to creep up and silently take down an enemy, but in the search for a pirate's treasure, stealth is now given more emphasis. Some firefights can be avoided altogether with a few sneaky takedowns and creative ledge-shuffles.

And while the action is undeniably great, the series has not done away with climbing and puzzle-solving as you head off to do some real tomb-raiding.

If there's one area that's created concern among Drake diehards, it's the decision to open up some of the environments. Would player autonomy sacrifice the cinematic storytelling and set-pieces for which the series is renowned? Not at all, it turns out.

Mostly, it's allowed for more improvisation during combat, but some areas go further than that – the most obvious being Madagascar, which you explore by Jeep. All the environments are stunning, whether it's the craggy,

snowy Scottish mountains or the sun-drenched, paradise-like islands that you explore by boat. So chuffed is developer Naughty Dog with the look of the game, it's even introduced a new photo mode.

This could well be the most beautiful game ever created, featuring one of the most likeable characters ever made. As Nathan Drake's story finally comes to a close, you'll be sad to say goodbye to this incredible gaming series.

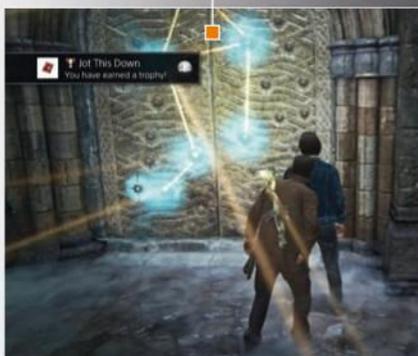
Tom Parsons

STUFF SAYS A fittingly epic send-off for one of gaming's most thrilling series ★★★★★



A brother? Yep. Despite never being mentioned before, his name is Sam.

Drake's stealth attacks include this devastating punch from above.



Draking around with your pals

Who buys a Naughty Dog game for the multiplayer? Very few, I suspect, but the surprising brilliance of deathmatch in *The Last Of Us* is something Sony is keen to repeat.

There are three main modes playable over eight maps set in locations including Scotland and Madagascar. The movement, cover and shooting mechanics are all *Uncharted* through and through, but before each match you choose a loadout and character.

At the most you'll be playing a 5v5 game, and the relatively small team size makes for tight battles that reward teamwork, especially when it comes to reviving incapacitated allies. You also earn cash to spend on heavy weapons, special mystical attacks and even AI sidekicks.

It's fair to say that, while combat is very tight and responsive for an *Uncharted* game, it doesn't have the instant accuracy of serious competitive shooters. That may appeal to those who find *Call Of Duty* stressful – and as gamers get used to the mechanics it could turn into the creepier, more tactical affair that Naughty Dog is clearly gunning for. We'll just have to wait until everyone's got their hands on the game.



PS4, PS3, PC, Xbox One,
Xbox 360 / pes.konami.com

UEFA Euro 2016 Pro Evolution Soccer

Forget what happens in the real competition — you could be dribbling your way to the final of the virtual one. But can PES's Euros tie-in give FIFA a real match?

The stage is set, the stadium bursting with sound and colour. It's the opening game in a historic European Championship — the first to feature 24 teams — and as my squad belts out the Belgian anthem, I wonder if it'll continue to be a tournament of firsts. The first, perhaps, to see Belgium crowned champions? After four games, a Cristiano Ronaldo hat-trick and a penalty shootout, I'll have my answer...

This isn't a premonition about the upcoming Euros, but rather what happened during my first play of *Pro Evo's* official Euro 2016 tie-in. If you already own *PES 2016*, you can download the free Euro content. Or, if you buy the physical version, the main game comes packaged with it. But is it worth your time?

For me, the answer was obvious as soon as Belgium limped out on pens. A defeat in a football sim has rarely felt so exhilarating, and that's due to the slick core gameplay. Whenever you're not jinking past defenders or smashing in goals,

you'll be staring as the opposition throws everything at your dazed defence. Even the hungover centre-backs think they're Messi, and the only pity is that tackling is so sloppy and inconsistent.

Although *Pro Evo* might not be as tactical as its FIFA-licensed counterpart, that's not to say its teams and players don't feel unique. It's great to see Italy calmly pass the ball around, watch Ireland defend deep, and tremble with fear as Sweden hoof everything up to Zlatan. Konami has spent a lot of time replicating playing styles.

Still, this expansion doesn't manage to address any of *PES's* biggest failings. It only features one authentic tournament locale (the Stade de France), and there are no qualifying campaigns, so if your team didn't make it to the finals, you won't be able to right that wrong in the digital world.

Fortunately, just like Steven Gerrard's famous slip, these are forgivable failings. It's hard to deny that Konami has served up a tie-in that gets more right than wrong.

Chris Kerr

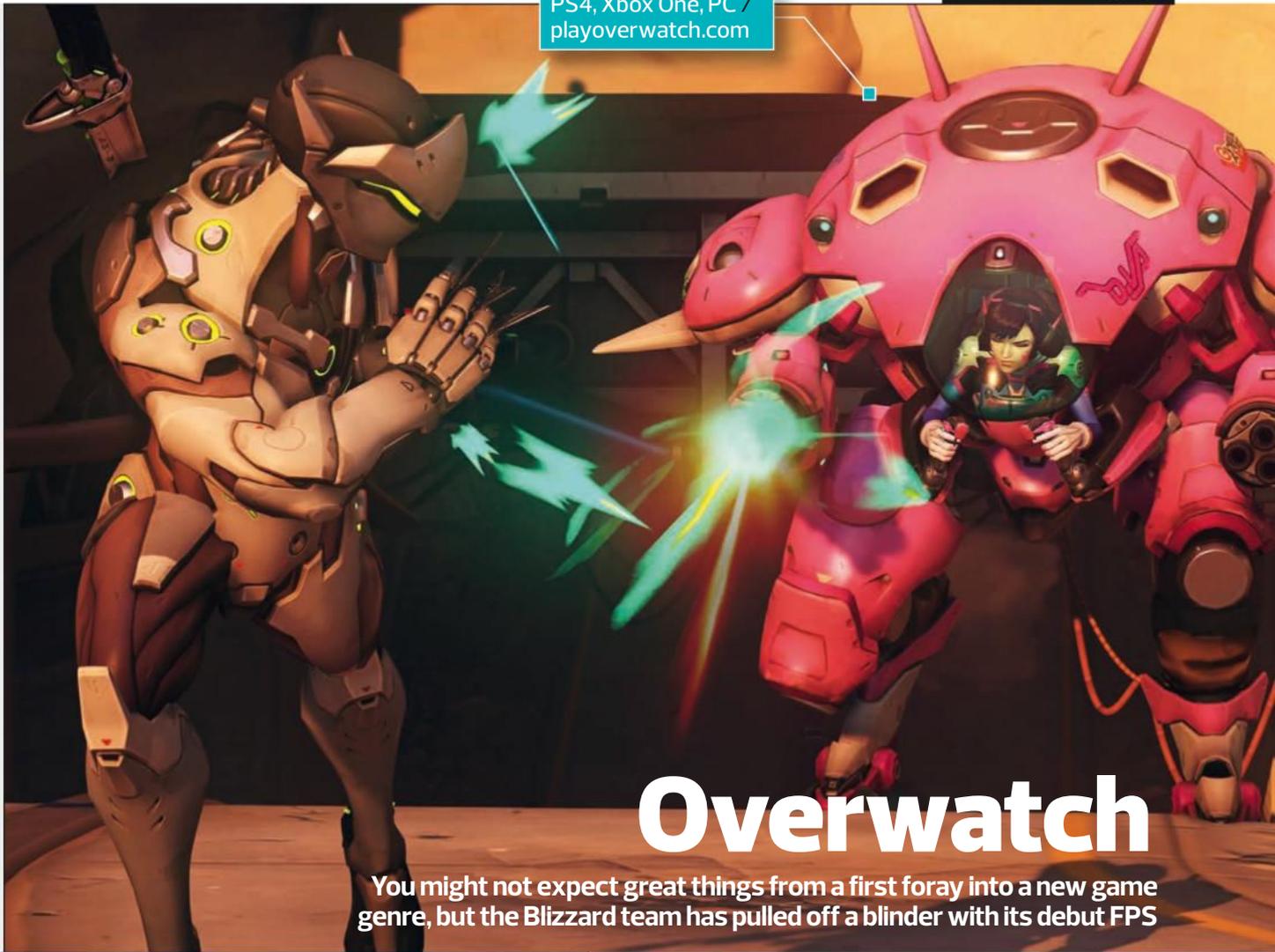


There are 24 teams taking part in the Euros, but the DLC only features 15.



Players now look more lifelike, except for the 'dead behind the eyes' expression.

STUFF SAYS The gameplay makes up for most of this Euro 2016 tie-in's failings ★★★☆☆

PS4, Xbox One, PC /
playoverwatch.com

Overwatch

You might not expect great things from a first foray into a new game genre, but the Blizzard team has pulled off a blinder with its debut FPS

Exploring the various heroes' abilities and weapons is one of the highlights of *Overwatch*.



The three match types offer plenty of variation and intense, eye-pleasing action.



Remember Blizzard? Well, the *World Of Warcraft* developer now has a first-person shooter. And it features giant apes in power armour.

Imagine Pixar ditched films and you've got the gist of *Overwatch*. Countless hours of my life have been hoovered up by its closed beta, and the full release is set to do the same. This is the most joyful shooter I've played in a long time, blending old and new for a mechanically complex experience that's easy to enjoy.

Those seeking ladder-climbing glory may be frustrated by some of the compromises made for the sake of a harmonious community. But if you like to play for 10 minutes of unbridled fun, then this is the unmissable shooter of 2016.

It's a game where notching up kills will guarantee you victory. Across each of the game's three match types, players are divided into two teams of six. In Escort, the attackers must escort a payload to its destination while the defenders try to stop them. Assault sees both sides battle

to secure control points. Finally, in Control, two teams fight for dominance of a single point. Each mode is terrifically tense.

That in itself doesn't make *Overwatch* special – but the sight of robot ninjas fighting among-clad behemoths does. Classes in FPSs aren't new, but this game straps that idea to a moon-bound rocket ship. Rather than eight basic types, there's a huge list of 'heroes'. Class dictates everything about a character, from health and primary weapon to abilities and role. Every inch has been thought out.

Firing a gun is fun enough. Firing off four abilities in a row is a riot, and makes for the kind of dynamic, fascinating plays that every gamer dreams of.

There is one chink in this shining knight's armour: Ranked mode, which has no way of stopping players leaving mid-match if they're losing. Still, who cares when Quick Play is just so damned jubilant? Make no mistake, this is the best shooter of the year so far.

Justin Mahboubian-Jones

STUFF SAYS Polished and satisfying, this is one party that you'd be mad to miss ★★★★★



Media hoard

This month's star-spangled reviews of the best new releases include a satirical tour of the world, an album that isn't an album, and a pandemic of human combustion



Where To Invade Next_cinema

It's a long old time since Michael Moore last fronted a documentary (2009's *Capitalism: A Love Story*) and he seems to have mellowed: *Where To Invade Next* is far less shouty and sensationalist than much of the work he's famous for.

This doc, though, is contrived and misleadingly titled. Far from being about where the Eye of Sauron (the US military) might focus its gaze next, it's essentially a jaunt around a bunch of mostly European countries that have laws, policies or social conventions so brilliant that Moore 'steals' them to take back to the US.

So he steals long lunches from Italy, education from Finland and prisons from Norway. There's lots of detail around how these work

and what the results are: Italians are more productive, Finns are the best-educated people in the world despite no homework, and Norway has ultra-low re-offending rates because it focuses on rehabilitation not punishment. While many of the ideas will seem less radical to Brits than to his US audience, there are plenty of eye-openers.

As always, Moore tends to simply leave out facts that don't support his agenda, and the mock planting of a flag at the end of each section is more awkward than funny. It's also too long, but over its two hours you'll learn and laugh enough to not regret the time spent.

Tom Parsons

STUFF SAYS ★★★★★☆



Deadpool _Blu-ray, DVD, VOD

"You're probably thinking, 'This is a superhero movie, but that guy in the suit just turned that other guy into a f***ing kebab.'" Welcome to *Deadpool*, a stunningly violent and relentlessly profane entry in Marvel's universe. And, for the most part, Ryan Reynolds' blood-red romp is plenty entertaining – despite its self-satisfied tendencies.

Rob Leedham

STUFF SAYS ★★★★★☆



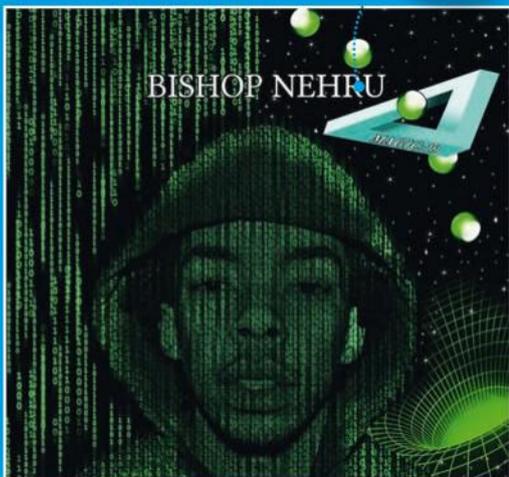
Bone Tomahawk _Blu-ray, DVD, VOD

Kurt Russell gets 2-for-1 from the facial hair he grew for *The Hateful Eight* in this gruesome but surprisingly funny horror/western. It follows four men tracking "flesh-eating savages" whom they suspect of abducting three villagers. When it gets gory, *Bone Tomahawk* doesn't hold back. Not for vegetarians.

Tom Wiggins

STUFF SAYS ★★★★★☆

LISTEN



Magic:19 _ Bishop Nehru

When is an album not an album? When it's a mixtape, which is what the hip-hop world calls a collection of new rhymes over other people's beats.

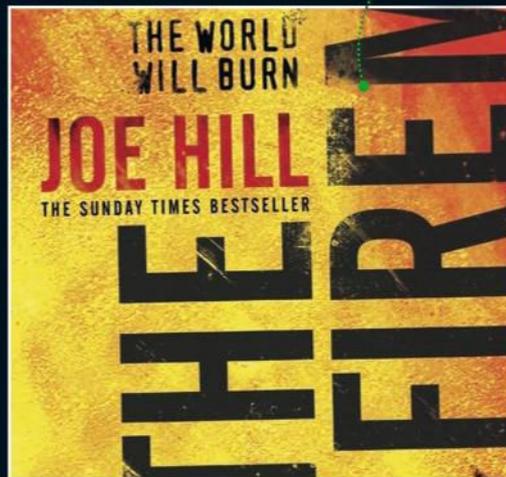
But while this might not be the real album many are waiting for from the 20-year-old New Yorker, he has a knack of making the beats sound as if they're his own. *Usted Debe Saber* rides on boot-of-the-car bass and a ghostly, Burial-esque

vocal sample, while sinister piano and slasher-movie bass stalk the corridors of *He The Man*.

There's a reason Bishop is compared to Nas, and it's on full display here. When that debut arrives, Bishop should find himself talked about in the same breath as Vince Staples and Earl Sweatshirt among the best of a new generation. *Tom Wiggins*

STUFF SAYS ★★★★★

READ



The Fireman _ Joe Hill

Not all fictional pandemics come in the form of plague or zombies, as Joe Hill shows in his hefty sci-fi in which fire threatens to reduce humanity to ashes. Around the world, people begin to spontaneously combust at an alarming rate, with black and gold dragonscale on their skin marking out their fate.

When nurse Harper finds herself infected, she escapes what's left of civilisation to try to save

her unborn child. Along the way she seeks help from a man known as The Fireman, who has learned to tame the flame within.

It's set to blaze through bestseller lists, and Fox has already acquired film rights to this exhilarating if slightly wearisome epic. Perhaps the overloaded plot would have worked better split up into a series. *Emily May*

STUFF SAYS ★★★☆☆



Minor Victories _ Minor Victories

The Venn diagram for donor bands Slowdive, Mogwai and Editors would converge on 'brooding' and 'effects pedals', but this album sees them meld into a different sonic beast. Dark, epic and bound together by sweeping strings, it's mesmerising (particularly on *Folk Arp*) but might leave fans of shoegazy fuzz a bit cold. *Mark Wilson*

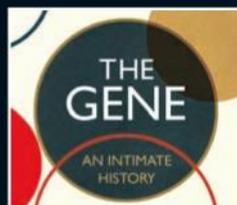
STUFF SAYS ★★★★★



Helter Seltzer _ We Are Scientists

While *We Are Scientists'* gigs and videos can feel like comedy showcases, their recorded output is surprisingly humour-free. Here we get plenty of hook-heavy tunes, bathed in an '80s rock sheen that wouldn't be out of place soundtracking a thong-clad Arnie marauding across a fantasy landscape. In a good way. *Marc McLaren*

STUFF SAYS ★★★★★



The Gene _ Siddhartha Mukherjee

Computer code might have changed the world, but it's small fry compared to the potential of the human genome. Those looking for a nutshell story about gene editing might find this 'complete history' to be overkill, but *The Gene* is a brilliant, definitive guide to the science's terrifying past and our tantalisingly close 'post-human' future. *Mark Wilson*

STUFF SAYS ★★★☆☆



Build Your Own Drone _ Alex Elliott

If you love tinkering and flying mini aircraft, then this – the latest of Haynes' DIY project books – is for you. Concisely covering the hobby, Elliott details step-by-step projects for fixed-wing and rotary craft, the history of drones, and the current legislation pitfalls. A worthy resource for both novices and experienced hobbyists. *Peter Brown*

STUFF SAYS ★★★★★

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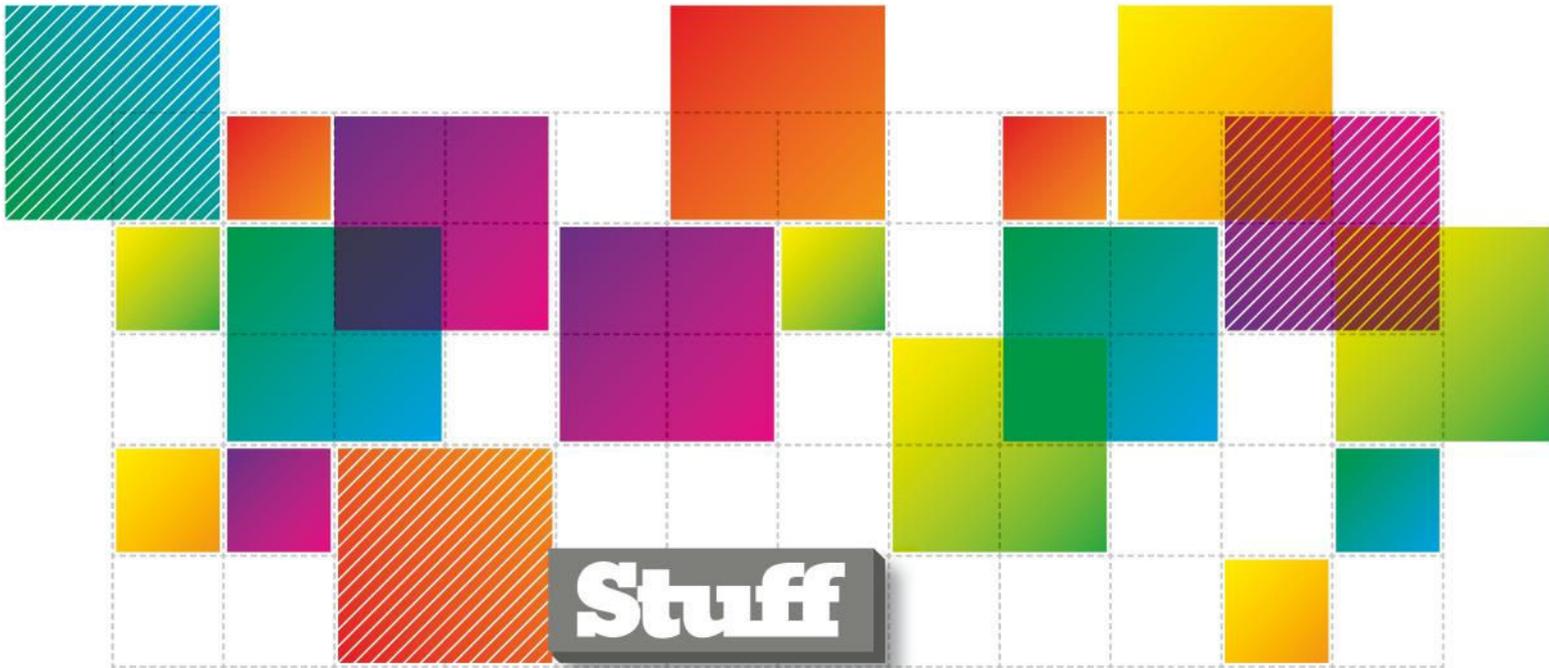
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PROJECTS



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WHAT'S THE BEST APP FOR TRANSLATION?
Bono estente!



BETA YOUR-SELF



GARAGEBAND

Whether you're a dabbler or a veteran tunesmith, GarageBand is a powerful musical tool. Craig Grannell reveals how to turn its talents into a software supergroup

THE BASICS

■ **Embrace loops.** On OS X and iOS, GarageBand has a loop browser, enabling you to create songs by drag and drop. This is great for building confidence in songwriting. Using the occasional loop can also add texture to custom compositions.

■ **Use Smart Instruments.** Ignore those who balk at the idea of automated accompaniment. Smart Instruments in GarageBand for iOS are an excellent way to learn how to construct chord progressions, and also a speedy means of fashioning a custom backing track to jam along to.



■ **Learn to play.** In the 'New Project' dialogue on OS X, click 'Learn to Play' for playalong intro vids for guitar and piano. Lesson Store has free full courses and £4 tutorials where artists teach you how to play their tracks.

■ **Tap dance.** Live Loops are handy for experimenting with song arrangement, tapping at buttons on a grid to trigger the

loops. You can also add tracks, or record loop playback to use later in your own songs. (It'll record as an audio file or MIDI data.)

■ **Can it.** Even if you have a swanky new iPad Pro, its speakers won't be suitable for mixing music. So get some good cans on your ears (we like the Bowers & Wilkins P5 Wireless).

■ **Understand iCloud.** GarageBand's iOS and OS X versions are similar but not identical. Songs saved to iCloud are primarily designed to be accessible only on the same platform. You can import iOS songs into OS X (File > iCloud), but they won't go the other way.



KEYBOARD WIZARD

■ **Perfect timing.** Improve the timing of virtual instruments with quantising. In OS X, it's in Piano Roll > Notes in the Editor; in iOS, it's in the Mixer. You can also slow the tempo for tricky bits.

■ **Playing patterns.** An arpeggiator is an excellent tool for electronic music, sounding each note of a chord in sequence. Access it through the 'five dots arrow' button. It's great for bass and drum tracks.

■ **Virtual keys.** No USB piano keyboard? Window > Show Musical Typing lets you use your Mac keyboard.



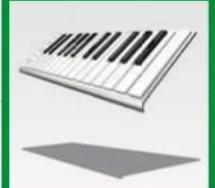
LEVEL UP WITH...



APOGEE JAM

from £70 / apogeedigital.com

The JAM is a plug-and-play system to connect electric guitars and basses to a Mac or iOS device. The original is studio-quality (make sure you get a Lightning cable in the box) but, for an extra £30, the JAM 96k further ramps up the quality in terms of build and recording resolution.



CME XKEY

£90 / cme-pro.com

Although you can tap on your Mac's keyboard or iPad's screen to trigger sounds, a MIDI keyboard's better. The Xkey is small, light, responsive and portable, even if the short key travel initially feels a little strange. For iOS, you'll also need Apple's misleadingly named Lightning to USB Camera Adapter (£25).



SPARK DIGITAL

£150 / bluemic.com

This dinky microphone ably deals with vocals and acoustic instrument recordings, and has connectors for iOS (Lightning) and USB. If the price tag's too rich, consider Blue's Yeti mics instead (from £100), although you may need a powered USB hub (£20 or so) to get one working with an iPad.



AXE GRINDER

■ **Tune up.** Get your guitar in tune before recording. On OS X, the tuner button is in the main toolbar; on iOS, it only appears when viewing an Amp track.

■ **Level up.** When plugging a guitar into your Mac or iOS device (see panel, Apogee JAM), check your levels. Play parts of your song and adjust the level before recording.

■ **Twiddle up.** GarageBand's amps (and FX pedals) are digital recreations of real ones. Play with the dials to get the perfect sound, adjusting gain, EQ, reverb, presence and other settings.



SONGCRAFTER

■ **Copy and paste.** Use Tracks view to copy and paste from your best performances or cover up errors. Plenty of songs that sound 'live' in fact use individual notes taken from dozens of performances.

■ **Song arranger.** Use GarageBand's arrange tools to create song sections (verse, chorus, etc) that can be copied/pasted/reordered in their entirety. Track > Show Arrangement Track shows the feature on OS X. On iOS, Song Sections are more limited (no section naming), and accessed via the '+' menu in Tracks view.



MIXMASTER

■ **Audio units.** In OS X, you can expand GarageBand by way of AU plug-ins. If a compatible one has been installed on your Mac, click the Instrument slot in Plug-ins, and select it from the menu. Its settings can be adjusted in its pop-up window.

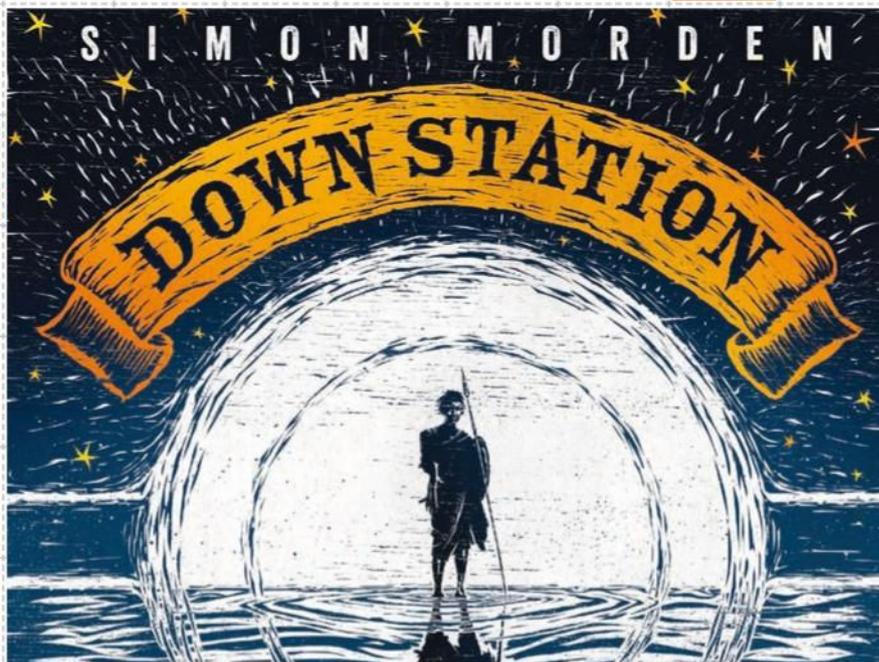
■ **Inter-App Audio.** In iOS, GarageBand won't load new instruments directly into the app, but you can use Apple's Inter-App Audio to record third-party synths/audio apps into GarageBand by way of an Inter-App Audio track. Note that the end result will be a waveform, not MIDI data.



PLAYLIST

SCI-FI EBOOKS

No holiday suitcase is complete without some fictional worlds bursting with tech and space drama – here are the best new sci-fi reads for your beach-bound Kindle



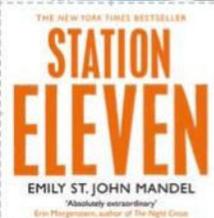
Down Station
Simon Morden
With a similar beginning to Philip José Farmer's *To Your Scattered Bodies Go*, a bunch of Tube workers run from a huge fire and find an underground door leading to a sunlit beach. They pass through, and the door disappears. What follows is magical, violent and thrilling.
£8.99



Under the Skin
Michel Faber
Even if you've seen Scarlett Johansson's turn as an alien predator in the 2013 film, it's well worth devouring the chilling novel it's adapted from. More slow-burning than the movie, it's an oddball compelling thriller that's probably best not combined with a summer barbecue...
£5.22



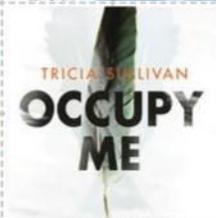
Ancillary Justice/ Sword/Mercy
Ann Leckie
Ambitious and wildly inventive, this trilogy is essential reading for fans of military sci-fi. It follows a sentient spaceship with a hive mind capable of controlling hundreds of once-human 'ancillaries'. That is, until 'it' is destroyed and a lone ancillary escapes.
£18 (for the trilogy)



Station Eleven
Emily St John Mandel
Some would argue (wrongly) that this post-apocalyptic tale isn't sci-fi, but don't let the lack of spaceships put you off. An audacious thriller about a pandemic called Georgia Flu, it also manages to be a poignant meditation on fame and fate.
£4.29



Nemesis Games
James SA Corey
This grand, far-future space opera is full of big characters and bigger action scenes. The fifth (of nine!) books in the series' *Empire Strikes Back* moment, making it a great entry point. Despite some far-future tech, the plot manages to remain grounded and very accessible.
£5.99



Occupy Me
Tricia Sullivan
A heady mix of sci-fi, paranormal fantasy and thriller, this gripping yarn follows a muscular angel called Pearl. While working for an organisation that attempts to help the world with stealthy kindness, she finds a suitcase that appears to be an entrance to a higher dimension.
£8.99



The Human Division
John Scalzi
Fan of *Battlestar Galactica*? Stop downloading old episodes for your plane journey, and take this instead. The fourth book from the *Old Man's War* series is our favourite, with a great plot setup and a host of self-defeating characters that you can't help but love.
£4.79

[Words: Darny Wadeson]



SCI-FI EVOLVED: THE SUB-GENRE CLASSICS

CYBERPUNK

Neuromancer
William Gibson

The original cyberpunk novel has it all: a hacker hero, a Tokyo-esque city, sinister corporations and AI. It also coined the word 'cyberspace', aptly describing it as a "consensual hallucination experienced daily by billions".



PSYCHOLOGICAL

The Drowned World
JG Ballard

Set in the year 2145 in a post-apocalyptic London, this classic describes a world where the ice caps have melted and Nature is taking back the planet. As their environment changes, human minds regress to a primal state.



SPACE OPERA

Consider Phlebas

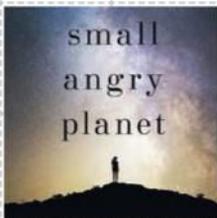
Iain M Banks
Epic, emotional and overblown: that's space opera. And *Star Wars* isn't the only galactic tussle you should dive into. The first of Banks' *Culture* novels sees a mercenary hunt a rogue AI that's protected by a god-like alien.



APOCALYPTIC

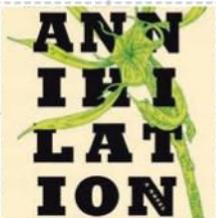
Cat's Cradle
Kurt Vonnegut

In this classic, fatalistic satire about the shortcomings of modern man, a scientist figures out how to get water to freeze solid at room temperature, but doesn't stop to wonder if that might be a bad idea.



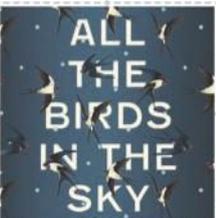
The Long Way To A Small, Angry Planet

Becky Chambers
A self-publishing phenomenon, this is everything a space opera should be: original, ambitious and funny. It follows a group of people who've been thrown together in a small wormhole-building spaceship that looks not unlike *Red Dwarf*'s 'trash can'.
£1.99



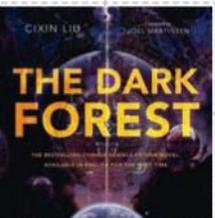
Annihilation
Jeff VanderMeer

If you've been binge-watching old episodes of *The X-Files* on Amazon Prime, here's your holiday read. 'Area X' is an eco catastrophe near a US military base. No-one knows what caused it or what's inside. Cue a torrent of mysteries that would leave even Mulder baffled.
£3.99



All the Birds in the Sky
Charlie Jane Anders

It's not often that science and magic combine well, but Anders achieves it here. The novel maps the lives of Patricia, a witch, and Laurence, a super-computer-building geek. Naturally, these outcasts are brought together to try to save their unravelling world.
£3.79



The Dark Forest
Liu Cixin

China's top sci-fi author has delivered a century-spanning thriller that manages to be both blisteringly original and an amusing page-turner. Be warned, there is astrophysics, but the gripping plot sees mankind preparing for an alien invasion that's still 400 years off.
£5.79

6 INSTANT UPGRADES

TRAVEL TECH FOR KIDS

Epic holiday journeys don't mix well with most kids' attention spans. No need to resort to 'I spy' with these boredom-killing toys, accessories and apps...



[Illustration: Jamie Sneedon Words: Craig Gramell]



1 LEAPFROG EPIC

Kids love tablets, and while you could just let them loose on your iPad, we'd recommend buying them a child-focused tab like this. For starters, you'll feel much more comfortable: the Epic runs Android but it comes with a customisable LeapFrog skin, safe browsing and curated app store – no more cries of "Daddy! It says I have to pay some money!" LeapFrog's own apps are pricey, but they are also educational without looking like lessons, so there's less chance of your child just spending hours on *Angry Birds*. **£95 / amazon.co.uk**



2 ONANOFF BUDDYPHONES INFLIGHT

Most headphones are easily lost or broken, and not that kid-friendly. BuddyPhones are strong and bendy, and come with stickers for your little tyke to personalise their pair (or the long-suffering cat). We like the flat cable (less chance of it getting tangled or eaten), but the best bit is adjustable volume. You can protect your child's ears with 75dB, or temporarily boost the volume to 85 or 94 while on a plane. **£35 / onanoff.com**



3 FISHER-PRICE BRIGHT BEATS DANCE & MOVE BEATBO

This deranged sort-of-rabbit feels like the creation of engineers who spent a bit too much time clubbing in the '90s. When a foot button is pressed, the creature explodes into song, encouraging its toddler friend to move to the beat. Thanks to its built-in mic, there's also a mode to record a phrase that's then 'remixed' into a song. All the while, a grid of tummy lights dazzle you in a bewitching manner. All hail hypnobunny! **£35 / fisher-price.com**



4 VTECH KIDIZOOM ACTION CAM

You probably won't want to arm a kid with your GoPro, so the Kidizoom Action Cam is the next best thing. The waterproof case enables the camera to be used underwater, and protects it when it inevitably has an unfortunate meeting with a concrete floor. The Kidizoom can be mounted on a bike or helmet for the kind of action movies that will later fill parents with horror. Budding creative types can eke out further joy by messing around with timelapse and video effects. **£50 / vtech.co.uk**



5 VIEW-MASTER VIRTUAL REALITY STARTER PACK

As far back as 1966, generations enjoyed (then swiftly discarded) their View-Master stereoscopic toys, with inserted discs that moved with a 'klunk' that was more satisfying than the actual content. Today's version is a take on Google Cardboard. With a phone shoved inside, reels and an app combine to provide augmented reality interfaces. These boast 360° views, peppered with interactive components and mini-games. **£25 / view-master.com**



6 CAT NAP CUSHION

During long journeys, even the most stubborn child is going to conk out, collapsing in a heap in the most unsuitable place. Help direct their nap locations by arming them with this cushion. This plush item can be worn over a hand, elbow or forearm, and works well on a floor, table or bed. Firebox helpfully notes that they "look a bit like Toothless from the *How To Train Your Dragon* movies", if that's your kid's thing. We rather like the pink one, with its evil eyes warding off anything that might interrupt its owner's 40 winks. **£15 / firebox.com**

DIGITAL DISTRACTORS



BEST FOR PRE-SCHOOLERS

Sago Mini Friends

Out of all the Sago apps, this one's particularly good. You choose a character and scoot about a neighbourhood. The mini-games are simple enough for most – fix a birdhouse; play dress-up; eat some snacks – and they cunningly promote empathy and sharing. **Free / iOS, Android**



BEST FOR PRIMARY SCHOOLERS

Toca Blocks

Minecraft is great, but it's slightly intimidating for the younger end of the gaming spectrum. *Toca Blocks* offers a creative sandbox within which kids can let their imaginations run wild. It's also all about digging and building, but as it's all in 2D it's a lot easier for kids to visualise. **£2.49 / iOS, Android**



FOR BIGGER KIDS

Love You To Bits

A point-and-click adventure reimaged for touchscreens: Kosmo must search for his robot girlfriend's components, which have been scattered throughout the galaxy. For kids and adults alike, there's a deluge of pop-culture references that are impossible to escape from. **£2.99 / iOS**

For more kid-distracting app ideas, check out Stufftv's extended list at bit.ly/kidappsandgames

? THE BIG QUESTION

What's the best translation app?

THE ALL-ROUNDER GOOGLE TRANSLATE

£free / iOS, Android

Google Translate has been the go-to pick for desktop-based language translation for a decade now, and it's showing no signs of slowing down. In fact, Google's effort has only grown in its abilities and effectiveness over the years, with the free Android and iOS app being the best way to actually put its skills to use when you're travelling overseas.

It currently supports an impressive 103 languages for typed (or finger-drawn) translation, but it's the other input options that you'll use even more regularly when on foreign shores. With certain languages, you can use two-way automatic



speech translation and carry on a conversation. Its ability to use your phone's camera to translate signs and menus is now even more magical as it works offline.

That's not even a full list of everything Google Translate can do. Other apps might best Translate in small and specific ways, but no app offers quite as complete a package as Google's. It's the one translation

option that can serve nearly everyone's basic needs... and then some.

GOOD FOR...

■ Everything in one app. Loads of languages. Real-time camera translations.

NO GOOD FOR...

■ No offline functionality for typed translations on iOS. Some dodgy phrasing.

THE CONVERSATION STARTER iTRANSLATE VOICE

£5 / iOS • £free / Android

If you're keen to chat to the locals rather than just holding up your camera to street signs, this is a great way to start two-way conversations.

It's a super-intuitive app that's fully focused on spoken language: you'll never need to type in a word or phrase to use it. You can quickly translate spoken dialogue between 42 languages, with the app speaking out the translation, while the Phrasebook feature lets you tuck away several favourite lines. *Mange tout!*

The iPhone version includes a great AirTranslate feature that lets two phones pair up to save the hassle of having to crowd around one device, making conversation feel more natural.



GOOD FOR...

■ Speedy conversational translations. Phrasebook feature. Pairing on iOS.

NO GOOD FOR...

■ Not a comprehensive translation app. High price.



THE FAR EAST ESSENTIAL WAYGO

£free / iOS, Android

If you're travelling to Asia and need help making sense of signs, this camera-based translator is for you. Designed for Chinese, Japanese and Korean characters (which Google Translate's camera doesn't support), it can translate anything you point your phone at without a connection, and can even give you the pronunciation of each word so you don't sound like an idiot when ordering dinner.



GADGET DOCTOR

Q: I'm a fan of 'over ear' headphones and love the great sound you can get from them. I've recently bought a LifeProof case for my iPhone 5s, which means the 3.5mm jack is no longer available. So, could you recommend a pair of 'over ear' wireless 'phones with great sound, comfort and easy-to-use controls to save reaching in my pocket to change the song or volume? If there's any chance of a wired backup option too, that would be great.

Jim Gardner

A: It depends a little on whether you need active noise-cancelling or not. Jim, if not, our picks are the Bluetooth AKG Y50BTs (£150, uk.agg.com), which serve up a clear, refined listen for a reasonable price. They also come with that handy backup headphone cable you're after. If you're planning to travel a lot, though, the Bose QuietComfort 25s (£250, bose.co.uk) are cable-free and have active noise-cancelling to drown out the roar of aeroplane engines.



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5-MINUTE HACKS

IF NOTHING ELSE, AT LEAST...

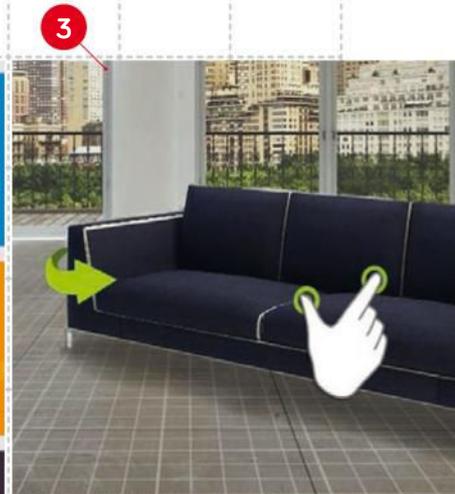
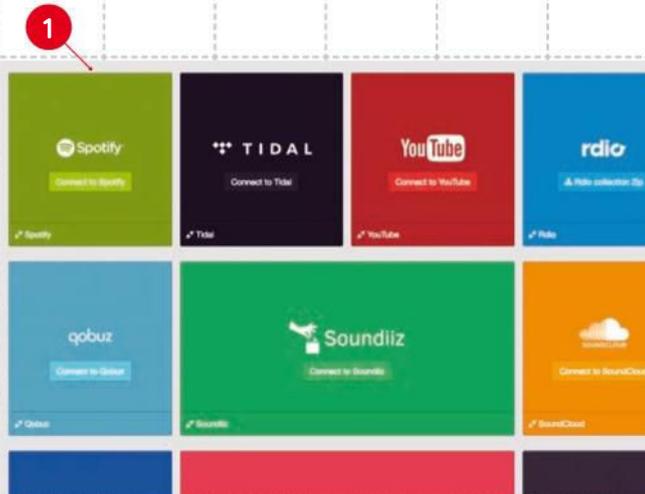
1...BECOME A SPOTIFY COMPLETIST

Want all your old CDs, iTunes downloads and Napster playlists filed neatly next to your Spotify Discover Weeklies? Here's how to bring it all under one musical roof:

Scan your CDs. To save typing in the names of all of your old albums, use CD Scanner For Spotify (£1.49, iOS). Scan the case's barcode and, as long as it's in Spotify's library, the album will appear in your account.

Import from iTunes. To make sure all those old iTunes downloads are in your Spotify library, click on 'local files' under 'your music' and drag the tracks into 'songs'.

Combine your playlists. Got some playlists marooned on the likes of Deezer or Tidal? Soundiiz (soundiiz.com) will convert them to Spotify playlists for you.



2...GET FREE APPLE MUSIC

Well, six months of it anyway. Apple's streaming service offers a three-month free trial, but with a neat 'Family Sharing' trick you can double that:

Side one. Sign up for a standard individual trial in the iOS Music app or iTunes. Don't forget to turn off auto-renewal in your Apple ID's subscriptions menu.

Family values. Just before your trial ends, go to the iCloud section in settings, tap 'Set up Family Sharing' and follow the steps.

Hidden track. Once a family member accepts your invite, he/she can start a new Apple Music trial using the family option. This means the whole family (including you) gets three months more of free access... plus, Apple hopes, an irresistible desire to keep the £15/month service after the trial ends.

3...LEVEL UP YOUR INTERIOR DESIGN

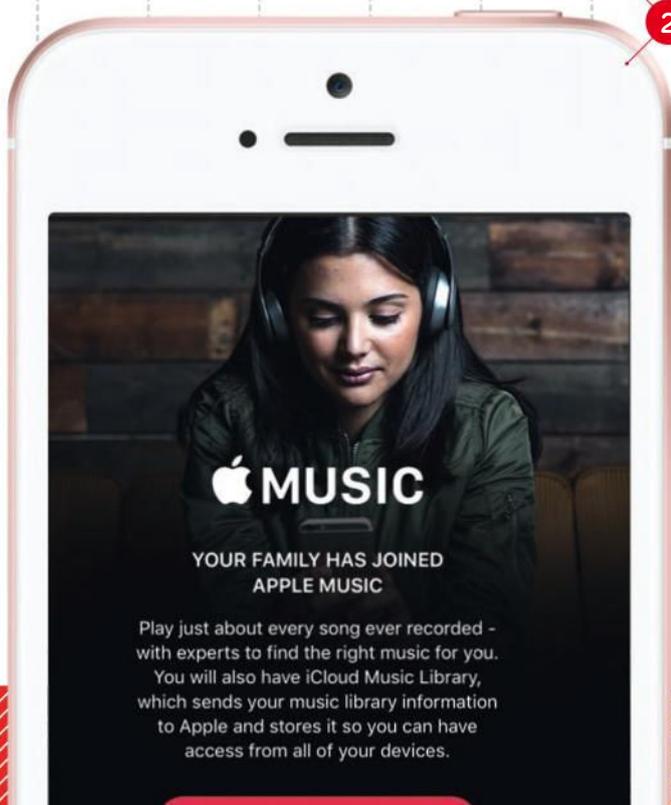
Disguising that battered old chair with an ill-matched 'throw' won't impress Sarah Beeny. Time to use tech to give your pad a makeover:

Measure up. Lost your dear old tape measure? MagicMeasure (£free, iOS and Android) is a handy stand-in. Take a picture of that sofa you're replacing and it'll overlay the measurements with around 95% accuracy.

Move the furniture. To try out new room layouts without herniating a disc, use the excellent Homestyler (£free, iOS and Android). Once you've snapped a photo of the room, you can fling 3D models of furniture, rugs and lights around until you find the right mix.

Be lazy. Decology (from £250 a room, decology.co.uk) is an online interior design service that lets you brief an expert then pick from their suggested concept boards.

2



TUNE IN NEXT MONTH TO...

- Learn how to build a race-ready drone
- Discover the greatest sports films ever made
- Master the art of editing holiday snaps

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TOP TEN

OF EVERYTHING

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 For full reviews of every product in the Top Tens, visit stuff.tv/reviews

HOT BUY

1



Samsung Galaxy S7

Welcome to the age of 'sensible Samsung', a smartphone maker of dependable excellence. The Galaxy S7 is straight up brilliant, setting a high bar for all of Samsung's competitors. It looks almost identical to last year's Galaxy S6 (except the camera bump has been trimmed), but it has a better camera, and has brought back the S5's water-resistance and microSD card slot. Plus it's got an always-on display and a whopping 4GB of RAM. We're smitten.

STUFF SAYS

An imperious update of our favourite phone from last year: this is the best smartphone you can buy from £550 ★★★★★

2



Samsung Galaxy S7 Edge

Compared to the brilliant S7, the S7 Edge has a bigger 5.5in display, a higher-capacity battery and, of course, that curved touchscreen with its swipeable row of widgets. If you can afford it, then paying £70 more seems reasonable for a better-looking phone.

from £640 ★★★★★

BEST FOR CUTTING-EDGE GADGETEERS

3



HTC 10

This handset barely puts a foot wrong, but it's a marketer's worst nightmare. What's it good at? Everything. What's special about it? Battery life. Stamina may be the least sexy of features, but knowing the 10 will survive an impromptu pub trip feels pretty good.

£570 ★★★★★

4



Apple iPhone 6s

"Everything's changed" is pushing it, but within the 6s's familiar body lies a surprising amount of innovation. You'll really notice the A9 processor's added speed, the 12MP camera's scope and quality, and of course, the time-saving delight that is 3D Touch.

from £520 ★★★★★

5



LG G5

The scale of the LG G5's ambition is breathtaking. It's a unique modular smartphone, allowing you to swap out its parts for improved ones, such as a bigger battery, camera controls or Bang & Olufsen audio tech. It's a big, ballsy move that we hope pays off.

£490 ★★★★★

6



Google Nexus 6P

The 6P gets the Nexus series back on the rails. Camera? Design? Performance? Software? All get a serious thumbs-up. Standouts include the finger scanner and the front camera, which are among the very best available at any price.

from £420 ★★★★★

7



OnePlus 2

The second OnePlus phone massively undercuts the big names with performance, software and battery life that far exceed some of the £500-odd competition... and now you can buy one without having to get hold of a silly invite.

from £250 ★★★★★

8



Vodafone Smart Prime 6

Want the biggest, sharpest display for under £100? This 5in 720p screen wouldn't look out of place in a phone twice the price. If you like gaming or want to watch videos on the move, this is a real bargain – as long as you don't mind being locked to Vodafone.

from £60 ★★★★★

BEST FOR SUPER VALUE

9



Apple iPhone SE

The cheapest iPhone ever made packs pretty much all the power of the iPhone 6s into the 4in aluminium shell of the iPhone 5s. Its compact, no-compromise concept should tempt plenty of newbies into Apple's world. The SE is the best small phone you can buy.

from £360 ★★★★★

10



OnePlus X

A super-value phone that sets a new standard among sub-£200 mobiles. Its design and performance are sound, with no sign of 'cheapness'. The only real issue is that the OnePlus 2 costs just £50 more – with a more versatile camera and realistic colours.

from £200 ★★★★★☆

● Prices quoted are for handset only unless otherwise stated

FOR THE FULL REVIEWS AND OUR SMARTPHONE BUYING GUIDE, VISIT STUFF.TV/TOP-10S/SMARTPHONES



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2. Open the app, hold your phone 10cm over the page and wait for the swirly vortex.



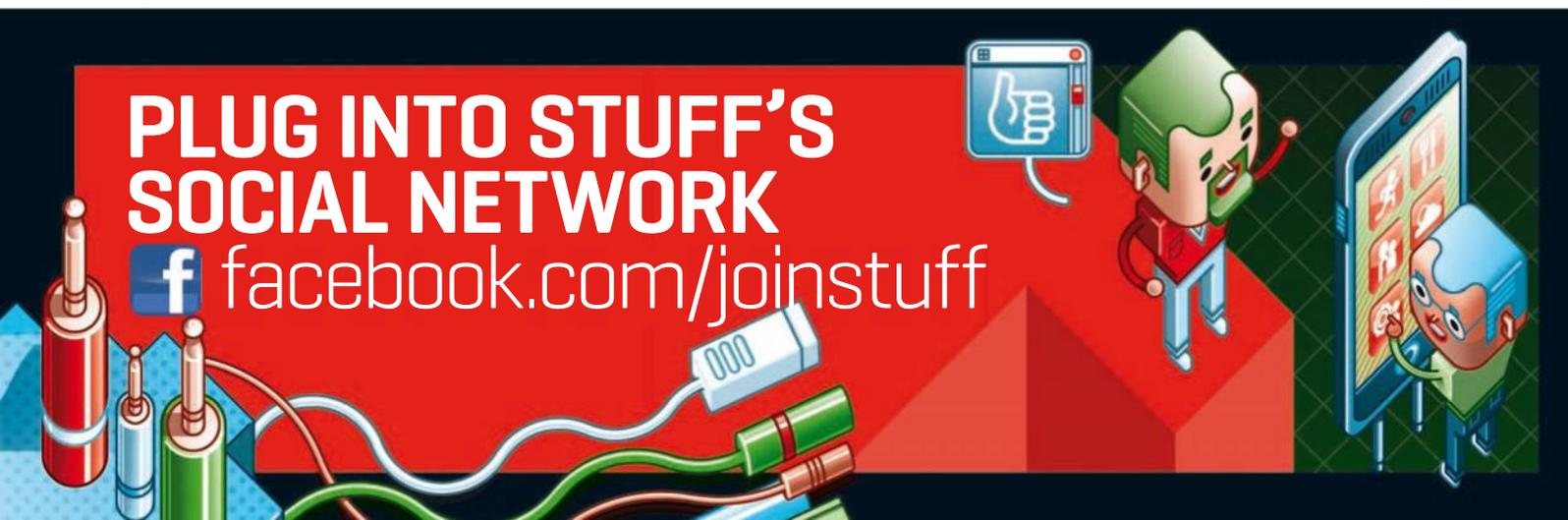
3. Scroll through the products and pick your options, then hit 'buy' or save it for later.

<p>HOT BUY</p> <p>1</p>		<p>Apple iPad Pro 9.7</p> <p>The iPad Pro 9.7 takes everything we loved about Apple's original 12.9in Pro tablet, makes it a lot more portable, and even adds in a few extras of its own. The True Tone display, which changes automatically based on ambient conditions, is a marvel, while the 12MP shooter is frankly overkill for those brave enough to use it out and about. It's expensive, but perfection usually comes at a price.</p>	<p>STUFF SAYS Incredible power, superb features and near-flawless design: the iPad Pro 9.7 is pure tablet perfection</p> <p>from £500 ★★★★★</p>
<p>2</p>		<p>Apple iPad Mini 4</p> <p>This is the mini tab we've been waiting for. It's 1.4mm thinner and 32g lighter, just the right size for a great portable entertainment hub, and subtle display tweaks will do justice to games and graphic novels alike. Plus it will easily last three days on a charge.</p>	<p>from £385 ★★★★★</p> <p>BEST FOR FUN ON THE GO</p>
<p>3</p>		<p>Samsung Galaxy Tab S2 8.0</p> <p>This is the best of the small-screen Android tablets, bringing you all the fab features of its bigger brother but in a smaller, even lighter form design. The 8in model is great for reading mags, playing games and watching films, while being easier to hold in one hand.</p>	<p>£260 ★★★★★</p>
<p>4</p>		<p>Google Pixel C</p> <p>The Pixel C is our new favourite tabtop. This 10in tablet with keyboard and 2K display is excellent for working on the go, and it'll handle demanding games easily. The Android OS is a major advantage – the choice of apps is years ahead of Chrome OS.</p>	<p>from £400 ★★★★★</p>
<p>5</p>		<p>Samsung Galaxy Tab S2 9.7</p> <p>Slimmer and faster, with a brilliant screen and serious stamina, the Galaxy Tab S2 sees Samsung back in the running for the Android throne. The Xperia Z4 almost pips it with its bundled keyboard, but the S2's a versatile, big-screen tab first and foremost.</p>	<p>£320 ★★★★★</p>
<p>6</p>		<p>Sony Xperia Z4 Tablet</p> <p>Sony has added a keyboard to this already stunning tab, so now it's handy for work as well as play, just like a Windows hybrid. Superb battery life, plenty of power, a slim body and super-vivid screen make this a great Android alternative to an iPad Air 2.</p>	<p>£500 (with keyboard) ★★★★★</p>
<p>7</p>		<p>Apple iPad Mini 2 with Retina display</p> <p>Yes, it's not as good as the new Mini 4... but believe it or not, Apple's iPad Mini 2 is the best cheap-ish tablet on the market. At this price, it's frankly bargain-tastic. That's why the 'old' model stays in our Top 10 – it's still a mini tablet of real quality.</p>	<p>from £195 ★★★★★</p> <p>BEST FOR SMALL BUDGETS</p>
<p>NEW</p> <p>8</p>		<p>Samsung Galaxy TabPro S</p> <p>If you want to get some serious work done without feeling like you're doing it on a toy, the TabPro S is a better option than even the iPad Pro 9.7. It's basically a full-on PC slimmed right down to skinnny tablet dimensions.</p>	<p>£850 ★★★★☆</p>
<p>9</p>		<p>Apple iPad Pro 12.9</p> <p>Apple's tablet colossus, the supercharged iPad Pro, is for serious creatives with deep pockets: the perfect digital coffee-table book that just about doubles as a laptop. To make best use of all that screen, remember to also buy a Smart Keyboard and Pencil.</p>	<p>from £680 ★★★★☆</p> <p>BEST FOR ARTISTIC TYPES</p>
<p>NEW</p> <p>10</p>		<p>Asus ZenPad S 8.0</p> <p>A top affordable tablet with a dazzling display – getting 2048x1536 pixels at this price is a big win. It's also dead slim and light, at 7.9mm and 316g; and with 8.5hrs of video between charges, the Zen Pad feels like a tablet you can take everywhere.</p>	<p>£170 ★★★★☆</p>

FOR THE FULL REVIEWS AND OUR TABLET BUYING GUIDE, VISIT WWW.STUFF.TV/TOP-10S/TABLETS

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HOT BUY

1



Sonos multiroom system

Who needs to drill holes and replaster walls to get a multiroom music system? Not you. With the addition of the cracking little Play:1 (£170) Sonos has made it easier than ever to start spreading your tunes around. Then maybe hook up a Connect to your existing hi-fi and router, and add speakers to a Connect:Amp in another room, or a SUB for a bass boost. You'll run out of rooms before you run out of options. For a further upgrade, the Arcam rSeries SonLink DAC works a treat with the Connect.

STUFF SAYS

Infinite music in every room without the need for custom installers? Sign us up now, please from £170 ★★★★★

2



Naim Mu-so

How much for a wireless speaker?! Well yes, but what a wireless speaker it is. Naim has ploughed all of its high-end hi-fi experience into delivering a beautifully made, great-sounding device with AirPlay, Spotify Connect and aptX Bluetooth all on board.

£895

★★★★★

BEST FOR ONE-BOX WI-FI HI-FI

3



KEF Muo

The KEF Muo sounds as good as it looks, which is very nice indeed. It may be the size of a beer can, but it creates a room-filling sound, brilliantly balanced and packed with vim and vigour. The Muo has the audio solidity of the B&W T7, but with even greater detail.

£300

★★★★★

BEST FOR PORTABILITY

4



Naim Mu-so Qb

This can-do cube complements its big brother's more refined character with a confident presentation that pays no attention to its physical size. And its features list makes it more flexible than Madonna's yoga teacher. A stunning addition to the Mu-so family.

£595

★★★★★

5



Google Chromecast Audio

The original Chromecast was a very bright idea: a device to stream TV directly from the internet. Chromecast Audio has arrived to do the same to your hi-fi. It's smart and highly affordable, and makes a huge variety of apps such as Spotify and Deezer more fun to use.

£30

★★★★★

6



Bowers & Wilkins Zeppelin Wireless

'Wireless speakers' and 'quality' don't always go hand in hand. But this is a desirable product through and through – and in terms of sound and design, not a penny is left unaccounted for. It's the ultimate wireless speaker for the streaming-savvy audiophile.

£500

★★★★★

7



Bowers & Wilkins T7

The T7 is B&W's first attempt at a portable Bluetooth speaker, and its good looks and real hi-fi sound combine to make it a real winner. It's solid and easy to use, and has an attractive honeycomb structure that helps reduce cabinet vibrations.

£300

★★★★★

8



Monitor Audio Airstream S200

It may look a bit like a floppy skyscraper, but the Monitor Audio's Bluetooth-plus-AirPlay speaker makes a lot of sense, mostly because it takes up very little shelf/desk/table space but makes loads of lovely noise. It's a bit of a steal at this price.

£200

★★★★★

BEST FOR PICNIC PARTIES

9



Cambridge Audio Go

There are loads of very cheap Bluetooth speakers out there, but we reckon it's worth spending that little bit more to get something that's really good – and that's the Go. It sounds awesome, it's really nicely built and its battery lasts a massive 18 hours.

£120

★★★★★

10



Bluesound multiroom system

Fancy a bit of Sonos-style multiroom but with better-than-CD-quality sound thrown in? You want Bluesound. There are all-in-one speakers, adapters for your existing hi-fi, and a Vault that rips and stores all your CDs. All can handle high-resolution audio.

from £270

★★★★★

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NEW £595 OR LESS



NAIM • MU-SO QB WIRELESS MUSIC SYSTEM

New compact wireless music system. Its advanced yet simple to use connectivity includes Spotify Connect, TIDAL, UPnP, Internet Radio, USB, analogue and digital inputs. Supports WAV, FLAC and AIFF files up to 24bit/192kHz. **Optional orange, red or blue grille £49.95**



£599 OR LESS

SONOS • PLAYBAR SOUNDBAR & WIRELESS SPEAKER

This plug-and-play unit incorporates 9 integrated amplified speakers. Simply connect it to your TV with the supplied optical cable to deliver an epic home cinema sound in your own living room. PLAYBAR can also expand your existing Sonos system.

WHAT IS IT? **AVOID THE SNAKE**

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NEW £599 OR LESS



PANASONIC • DMP-UB900 4K UHD BLU-RAY PLAYER

Premium player that features playback of Ultra HD 4K Blu-ray discs, HDR playback and 4K content from Netflix and other streaming providers.

BLUESOUND
HiFi for a wireless generation

Hi-Res **AUDIO**

WHAT IS IT? **AVOID THE SNAKE**
PRODUCT OF THE YEAR
Hi-Fi Choice
5 YEAR WARRANTY

BLUESOUND HI-RES WIRELESS MUSIC SYSTEM

Take hi-fi to new heights with Bluesound's next generation. Features improved wi-fi performance, more digital and analog connectivity options and Bluetooth aptX along with support for premium music services like Tidal and Spotify.

Prices from £269



HOT BUY 1		AKG K451 They've actually been around for a long time now, but what put the K451 on-ears back on to our radar was an official price drop from £130 to £80, and a real-world price of just £50 or less. For that money they're unbeatable – awesomely agile and punchy sound wrapped up in a subtly stylish and foldable design. Add both standard and three-button control cables for maximising compatibility and there's practically no excuse for not getting brilliant sound from your phone.	STUFF SAYS Fantastic sound and great portability at an almost unbeatable price: the perfect phone upgrade £40 ★★★★★
2		AKG Y50BT Proof that good wireless sound doesn't have to cost the earth: with none of the horrid hiss, whine, crack and pop that's often a glitch of Bluetooth headphones, these serve up truckloads of detail, with a full charge promising 20 hours of juice.	£125 ★★★★★ BEST FOR GREAT SOUND WITH NO WIRES
3		Bowers & Wilkins P5 Wireless The brand's first foray into wireless brings luxury for your ears inside and out: these are the Aston Martin DB10s of wire-free cans. If you like your sound authoritative, dynamic and subtle (and who doesn't?), you'll feel right at home with these P5s.	£330 ★★★★★
4		SoundMagic E10S This is actually the third version of SoundMagic's awesome, affordable in-ears – not that you'd tell by looking. They sound even better, though: a little smoother and more refined, with tight, weighty bass. Plus there's now a mic and button for smartphone use.	£35 ★★★★★
5		Bose QuietComfort 25 The best kind of silence is the kind you then fill with sweet, sweet music, and that's what the QuietComfort 25s give you. The active noise-cancelling quells office hubbub, air-conditioning and aeroplane hum, and delivers cracking sound in its place.	£200 ★★★★★ BEST FOR SHUTTING OUT THE WORLD
6		Soul Electronics Flex These simple in-ears are brilliant for workouts, as they stay put thanks to the comfortable and unobtrusive ear-hooks. Sound quality is excellent, with crisp treble notes, clean vocals and even a decent amount of bass for the money.	£45 ★★★★★
7		Sennheiser Momentum 2.0 The original Sennheiser Momentums were an almost perfect pair of on-ears, and we're pleasantly surprised that the sequel is even more thrilling. They're pricey, but dapper looks soften the blow, as does the lively, hugely transparent sound.	£150 ★★★★★
8		JBL Everest 100 The size of a pear drop, JBL's wireless buds are all about fuss-free fit. Their eight-hour battery life will help get you through the daily grind and their sound is one you could easily listen to for that long... if you don't mind your music on the meaty side.	£80 ★★★★★☆
NEW 9		Fidue A65 Chinese brand Fidue has a style-conscious audience in mind for these all-metal, well-balanced earbuds. For a fun yet detailed pair of headphones with a full-bodied sound and snappy dress sense, the A65s are well worth considering.	£50 ★★★★★☆
10		Jabra Sport Pulse A tech-packed but easy to use pair of wireless buds with good enough sound. The big draw here is connection to the Jabra Sport app, delivering heart-rate monitoring and pretty much any other stat you might want. There's also an inline remote and mic.	£95 ★★★★★☆

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Fancy a weekend of world-class motorsport and music? *Stuff* has teamed up with Silverstone to offer a huge discount on grandstand seats for the 2016 Formula 1 British Grand Prix on 8-10 July – including nightly concerts featuring big-name music acts.

Stuff readers can get 20% off tickets to the grandstand at the fearsome Stowe Corner, one of the fastest corners on the F1 calendar. It's a great spot to cheer on home heroes Lewis Hamilton, aiming for a third British GP win in a row, and Jenson Button.

As well as all the F1 and support races, you can see Texas and Scouting For Girls perform on Friday night, and Mike And The Mechanics on Saturday night. After the big race there'll be a huge Sunday night post-race party featuring several of the drivers, before The Feeling end the event in style. To take advantage of this incredible offer, courtesy of *Stuff* and Silverstone, call 0844 3728 300 and follow the instructions.

Terms and conditions: 1 The purchase of a ticket will gain entry to the Silverstone motor racing venue (the 'Venue') for the 2016 FORMULA 1 BRITISH GRAND PRIX. 2 The ticket is purchased for the 2016 FORMULA 1 BRITISH GRAND PRIX only. 3 Tickets are not transferable to other events and are strictly not to be offered for resale. 4 Tickets offered are for Stowe C grandstand and are subject to availability. In the event that Stowe C grandstand tickets are unavailable, an alternative grandstand of equivalent value will be offered. 5 This offer expires on Wednesday 15 June. 6 For full terms and conditions see <http://competitions.haymarket.com/s3/BritishGrandPrixReaderOffer>. The Promoter: Haymarket Media Group, Bridge House, 69 London Rd, Twickenham, TW13SP.

HOT BUY

1



Amazon Fire TV 4K

Amazon's new Fire TV is faster and more powerful than last year's model, but more importantly, it supports ultra-detailed 4K video: TV and movies in four times the resolution of Full HD. Of course, you'll need a 4K set to enjoy all those extra pixels, but if you're thinking of making the upgrade soon, this streamer is a tele-futurist's delight. With the added attractions of neat voice controls and great gaming functionality, it's the most complete streaming box you can buy.

STUFF SAYS

Netflix, iPlayer, Amazon video and Android games in one 4K-capable box

£65

★★★★★

2



Sky Q

A Sky subscription is already an expensive option, but Sky Q works flawlessly and could change the way you watch TV – especially when 4K arrives. Undoubtedly the best TV experience you can get, but only early adopters need to dive in right now.

from £100

+£42/month

★★★★★

BEST FOR TELLY ADDICTS

3



Q Acoustics Media 4

Sure, it doesn't look like much. And yet, this soundbar has won awards two years in a row from our friends at *What Hi-Fi?* The Media 4 combines subtle detail with precise surround effects to be the best-sounding and best-value soundbar you can buy.

£300

★★★★★

BEST FOR TRUE-TO-LIFE SOUND

4



Roku 2

Roku's new mid-range offering is the most compelling yet. It's essentially identical to the Roku 3, just without the smart remote. With a customisable feed, Netflix, Now TV, Google Play, YouTube and all the UK catch-up services, it's unbiased, slick and simple.

£60

★★★★★

5



Canton DM55

This soundbase is a bit like dark chocolate: it may look plain and unassuming, but it's packed with a rich and full-bodied character. If you want that extra oomph to your films without breaking the bank or sacrificing too much space, the DM55 is worth a look.

£330

★★★★★

6



Google Chromecast

The new Chromecast lets you search multiple streaming services from one app, offers better Wi-Fi and lets you use your phone to control Android games. For the seriously impatient, its smart preloading also plays Netflix episodes almost instantaneously.

£28

★★★★★

BEST FOR BUDGET STREAMING

7



Dali Kubik One

Dali knows a thing or two about making great-looking, great-sounding loudspeakers, and the Kubik One is a riveting listen. It can handle high-res files and offers a gorgeous high-end sound. If you've got the cash, this is a talented system worth investing in.

£800

★★★★★

8



Geneva Model Cinema

The impeccably built Model Cinema looks rather lovely (for a soundbase), and being a fairly slim box, it has no business sounding this huge and cinematic. It does so with authority and insight – it's like you're sitting in your own personal theatre.

£550

★★★★★

9



Philips Fidelio B5

This Philips isn't just a soundbar. It's a shape-shifting 4.1 system with detachable ends that can double up as surround or multiroom speakers. Clever, eh? Detail levels are sky high, while the rumbling bass charges along with accuracy and power.

£600

★★★★★

10



Apple TV (2015)

Cupertino still hasn't given us a real telly, but this powerful streaming device brims with potential. Its Siri Remote could be a game-changer and it works well as a platform for third-party apps and games; but for now it's more pricey and less open than its rivals.

from £130

★★★★☆

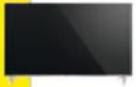
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HOT BUY NEW 1		LG OLED55C6V This is a truly stunning television. LG's OLED panel can go blacker than most TVs and will dazzle your senses with its brightness; it offers sharply etched detail, excellent viewing angles and solid HD upscaling. It also boasts support for both HDR standards: HDR10 and Dolby Vision. This means you'll be able to watch compatible content from Amazon, Netflix and UHD Blu-rays regardless of which format wins out in the future.	STUFF SAYS Packed full of tech with jaw-dropping performance, this is the TV your overdraft was made for £3000 ★★★★★
NEW 2		Samsung UE55KS7000 This set sprinkles a little extra stardust on top of its 4K and HDR brilliance in the form of 'Quantum Dot' technology, which claims to offer over a billion colours to point your peepers at. The result is an impressively refined performance.	£1500 ★★★★★
3		Samsung UE48J6300 A 48in screen seems to be the ideal size for most living rooms, and a prominent curve makes this Samsung eye-catching in every respect. The performance is stunning and the colours have the right balance of vividness and subtlety. This is a smart TV bargain.	£485 ★★★★★ BEST FOR VIEWING VALUE
NEW 4		Sony 55XD9305 Sony's stunning newcomer ticks all the boxes for a thoroughly modern TV: beautiful looks, 4K, HDR and much, much more. Above all, this is as stonking a picture as you're going to get this side of three grand, and in a svelte frame as well.	£2000 ★★★★★ BEST FOR THE WOW FACTOR
5		LG 55EG960V We knew that OLED and 4K together in one TV would be rather special. This 55in LG combines the unbelievable contrast of OLED with the super-sharp images of 4K to create a picture that's almost as real and enticing as looking out of the window.	£2500 ★★★★★
6		Panasonic TX-50CS520 This no-nonsense TV is proof the Japanese giant still has its mojo. Panasonic has focused on performance here, and it shows. This is a stunning picture that will have you questioning the price tag. Everything is sharp and cleanly drawn – great value.	£450 ★★★★★
7		John Lewis 55JL9100 Don't be confused – LG made a TV and John Lewis has slapped its logo all over it. This is an option for those who want a big 4K screen without paying big 4K prices. You will compromise on detailed video performance, but you'll still get LG's intuitive software.	£650 ★★★★☆
NEW 8		Panasonic TX-65DX750 If you want a big 4K telly that won't decimate your savings, this 65in Panasonic is a tempting option. It does fall short of the supercharged levels of peak brightness and colour bit depth that you'll find higher up this list, though.	£2000 ★★★★☆
NEW 9		Samsung UE40JU6400 This bargain 4K telly looks unassuming, and it doesn't do 3D or HDR, but the picture is very sharp indeed – all those pixels look lovely crammed onto a 40in screen. It's also good at upscaling, so your 1080p Blu-rays will look as crisp as a frozen Kettle Chip.	£500 ★★★★☆
NEW 10		Philips 65PUS8901 A seriously expensive 4K beast with HDR compatibility, this Philips has the Ambilux twist – creating a more immersive experience with nine projectors that extend the screen image onto the wall behind. Distracting? You'll quickly fall head over heels for it.	£4000 ★★★★☆

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HOT BUY

1



Apple MacBook Pro 13in (2015)

Apple didn't change too many parts of the MacBook Pro for 2015. There's a fancy new trackpad and the latest generation of Intel CPUs, which deliver better stamina as well as a chunk more power. This is an incremental upgrade, but given how good the Pro already was, that's more than enough to keep it right at the top of the laptop honours list well into 2016. If you need power as well as stamina and portability, this is one of the best laptops money can buy.

STUFF SAYS

It hasn't radically changed, but the Pro's performance and trackpad are top of its class. If it ain't broke...

from £1000 ★★★★★

2



Dell XPS 13 (2015)

The original XPS 13 was already a great light weight laptop, but now Dell has given it a Windows 10 refresh. If the last one was the thinking person's ultrabook, this is that and a whole lot more. With improved battery life and performance, it's hard to beat.

from £850 ★★★★★

BEST FOR PRACTICAL PORTABILITY

3



Schenker XMG U726

The U726 has the guts to run the most demanding games at full HD or 4K resolution with all settings maxed out, and the screen and speakers to make them look and sound blinding. If you want a proper games machine to stash away easily, this is perfect.

from £2700 ★★★★★

4



Asus ZenBook UX305

Asus knows what it's doing. It knows that the Apple MacBook Air laptops are treading water and the ZenBook UX305 is pretty much everything the 2015 Air should have been, with its fetching aluminium design and as good a display as any £1000 laptop.

from £550 ★★★★★

5



Toshiba Chromebook 2

Toshiba has created the most desirable Chromebook to date with some well-judged upgrades. Smaller, lighter and great value, the screen's resolution now has pin-sharp HD and the Skullcandy speakers are distortion-free. It lasted eight hours on test.

£200 ★★★★★

BEST FOR VALUE FOR MONEY

NEW

6



Apple MacBook (2016)

Prettiness in pink aside, this is much like last year's 12in MacBook. The 2016 version is skinny and fab to work on, with a lovely screen... but unless you'd lap up the extra hour's battery life, there's no real need to upgrade from last year's model.

from £1050 ★★★★★

7



Aorus X3 Plus v5

A great gaming laptop, minus the usual bulk. It can't quite match the Schenker XMG U726, but then it's more affordable and a lot easier to live with. It has a fantastic high-res screen, and all the power you'll need for future blockbusting games.

£1900 ★★★★★

8



Asus X555L

Fancy high performance for a low, low price? Of course you do! This bargain beast manages to cram in a speedy Core i5 processor and 8GB of RAM. With a crisp-feeling keyboard and responsive trackpad, it's a challenge not to be impressed with this Asus.

from £400 ★★★★★☆

9



Apple MacBook Air 13in (2015)

Apple is scraping by with pretty much the same Air design as before. You get a new processor, new connectors and slightly improved battery life, but still no Retina screen. However, if a portable road warrior is what you're after, this is a great choice.

from £850 ★★★★★☆

10



Microsoft Surface Book

Microsoft's finally made a laptop, and shorn of its initial bugs, the Surface Book is a lustrous Windows machine with premium appeal. With an innovative hinged design, plenty of oomph and a tablet option, this sleek hybrid gets a lot right.

from £1300 ★★★★★☆

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HOME COMPUTERS

HOT BUY	1		Apple iMac with Retina 5K display (2015) The 5K 27in iMac is the most desirable home computer in the world. It doesn't try any funny stuff or any 'revolutionary' gimmicks – fantastic hardware design, great software and a terrific screen make it a joy to use day to day.	from £1450 ★★★★★	
	2		Raspberry Pi 3 B It just keeps getting tastier by the year – 50% faster, 100% more Wi-Fi, same price. No other circuit board computer touches what the Pi offers as a package: the amazing value hardware, the mountains of online support and the sheer wealth of projects you can try.	£30 ★★★★★	BEST FOR DIY PROJECTS
	3		Sapphire Edge VS8 This mini-PC may look like the Terminator's lunchbox, but it houses AMD's 1.6GHz A8 APU and dedicated HD7600G graphics with 4GB of RAM. A capable little fellow, the VS8 even does a decent job with the latest gaming titles (with the detail dialled back a little).	from £260 ★★★★★	BEST FOR COMPACT POWER
	4		Alienware X51 (2014) The X51 hasn't changed a huge amount, but the wee size matched with powerful components make it perfectly suited to HD gaming. Steam Machines are going to liven this market up but right now it's the best balance of power and form in PC land.	from £880 ★★★★☆	
	5		Zotac Zbox Nano XS AD11 Plus Exceptionally tiny and powerful, this is a PC for the post-PC era. The Zotac manages to pack a dual-core 1.65GHz AMD Fusion processor, 2GB of RAM and a 64GB SSD into its sub-Mac Mini frame – making it the ultimate net-top or media centre.	£300 ★★★★☆	

GAMES CONSOLES

HOT BUY	1		Sony PlayStation 4 The best and most popular games machine on the planet. The PS4 has whisper-quiet operation, a sleek form and bags of power, with full 1080p on all titles and not a whiff of lag. And if 500GB of storage is too little for you, a 1TB model is now available.	from £275 ★★★★★	
	2		Microsoft Xbox One This is very different to the Xbox One of 2013. Most significantly, the unpopular Kinect feature is now out of the deal, allowing Microsoft to drop the price and releasing enough extra power for developers to make their games look and play better.	from £250 ★★★★★	
	3		HTC Vive HTC Vive is our VR headset of choice because of one key feature: frickin' laser beams. This allows you to roam free instead of being confined to a chair. Combined with two motion controllers, it's a completely new way to experience games.	£690 ★★★★☆	BEST FOR FUTURE GAZING
	4		Oculus Rift The wait is finally over, virtual reality has arrived, and Oculus got there first. The Rift is seriously impressive, a window into untold flights of escapism – you're going to want one. It really needs the Touch controllers, though.	£500 ★★★★☆	
	5		Nintendo Wii U While it hasn't had the same impact as the original Wii, don't underestimate the U's fun factor. Nintendo's bottomless bag of superb game franchises rolls on with the excitement of <i>Mario Kart 8</i> , with its anti-gravity karts and submarine racing.	£200 ★★★★☆	

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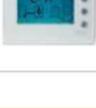
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WEARABLES

HOT BUY	1	 Apple Watch Apple's Watch is by no means the first smartwatch, but it is the most desirable. It's more luxurious (and yes, more expensive) than its rivals, its software is better thought out, and there are loads of interesting new apps.	from £260 ★★★★★	BEST FOR TECH YOU WANT TO WEAR
	2	 Jawbone UP3 With its latest band, Jawbone has delivered meaningful fitness data in a stylish package. The splashproof UP3 is unobtrusive, lasts over five days and does well not to overwhelm you with stats; instead it provides useful information at relevant times.	from £90 ★★★★★	
	3	 Pebble Time Steel It's very similar to the Pebble Time, but the extra Gorilla Glass 3 on the front makes it a bit less damage-prone and the bonus battery life means it'll last for a solid week of proper use. These tweaks ensure that the Time Steel is the best Pebble you can buy.	from £170 ★★★★☆	BEST FOR BATTERY LIFE
	4	 Fitbit Blaze A sports-first fitness watch with a subtle dash of smarts, the Blaze is a joy to use – with a brilliant battery to boot. Sure, off-device GPS isn't ideal, but accurate heart-rate tracking, multi-sports modes and a lovely interface make it a great workout buddy.	from £160 ★★★★☆	
	5	 LG G Watch Urbane While the original G Watch R didn't exactly set our hearts aflutter, the handsome Urbane is currently the best Android Wear smartwatch we've tried. It boasts a slick, superior screen that'll last you nearly two whole days on a single charge.	£175 ★★★★☆	

SMARTHOME

HOT BUY	1	 Nest Learning Thermostat (3rd gen) The latest Nest adds the ability to control your hot water (if you have a separate tank), as well as a slightly nicer dial with a bigger screen that, helpfully, shows you a clock when you walk past. It's not the most dramatic update, but it didn't need to be.	£190 (with installation) ★★★★★	
	2	 Netatmo Welcome Netatmo's smartcam now has added face recognition capability, which works reliably well once it knows a face, and all the usual motion and noise detection is controllable. We also like the way individual profiles can be adjusted. Slick and hugely informative.	£135 ★★★★★	BEST FOR HOME SECURITY
NEW	3	 Hive Active Heating 2 Simple enough for anyone to use and powerful enough to be useful, Hive is now far smarter, with features such as geolocation and holiday mode to help you save cash. For a family-friendly introduction to the connected home, this will take some beating.	from £250 ★★★★★	
	4	 Honeywell Evohome Set schedules to control the precise temperature of each individual room of your family home, using either the tablet-like central controller or the free Total Connect Comfort app. It's a big old investment, but you'll soon pity anyone living without it.	from £200 + £70/radiator + installation ★★★★★	
	5	 Hive The original Hive is a winner for those with old-fashioned boilers, plunging them into the connected age by letting you control both heating and hot water remotely. The system consists of a thermostat, a hub and a receiver – all controlled by an iOS/Android app.	£200 ★★★★★	

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SLRs

	1	 <p>Fujifilm X-T10 For rich landscapes, detailed macro shots, stunningly sharp portraits and everyday photos, the X-T10 beats most other choices at any price. It also handles beautifully and can be paired with some of the most consistently superb lenses you'll ever find.</p>	<p>£420 (body only)</p> <p>★★★★★</p>	<p>BEST FOR ALL-ROUND VALUE</p>
	2	 <p>Sony A7R II Yes, it's expensive, but the A7R II combines impeccable build quality with a class-leading full-frame sensor, 5-axis image stabilisation, huge ISO range, super-fast autofocus, an excellent viewfinder and 4K video recording. Simply the finest Sony camera ever made.</p>	<p>£1990 (body only)</p> <p>★★★★★</p>	
	3	 <p>Canon EOS 5DS A fantastic piece of kit that any pixel-peeping SLR fan will get heaps of enjoyment out of. The astounding 50MP sensor puts an incredible amount of pictorial detail at your fingertips, and the 5DS is very much pitched as Canon's ultimate stills camera.</p>	<p>£2170 (body only)</p> <p>★★★★★</p>	
	4	 <p>Olympus PEN-F The first with an electronic viewfinder and 5-axis stabilisation, this is the best Pen by some margin. It's similar spec-wise to the OM-D E-M5 II, but this is a hugely desirable piece of design and an immensely capable camera for all-round shooting.</p>	<p>£1000 (body only)</p> <p>★★★★★</p>	
	5	 <p>Olympus OM-D E-M5 Mark II The second coming of the E-M5 smashes it on both design and performance fronts. Images are gorgeous, and using the camera is a customiser's dream. It's small and portable enough for travelling, but also chunky enough to feel satisfying in the hand.</p>	<p>£640 (body only)</p> <p>★★★★★</p>	

COMPACT CAMERAS

	1	 <p>Sony DSC-RX100 IV Yes, it's pricey for a compact, but the high frame rate, fast burst mode and 4K video recording aren't to be sniffed at. The RX100 IV is a premium point-and-shoot that offers all the versatility, flexibility and all-round performance you could ever need.</p>	<p>£650</p> <p>★★★★★</p>	<p>BEST FOR POCKETABLE POWER</p>
	2	 <p>Panasonic Lumix LX100 This is one of the most capable premium compacts on the market – and the LX100's 4K capabilities give it a crucial edge over its rivals. HD video capture and superb stills performance make the Panasonic a star performer when it comes to the basics too.</p>	<p>£430</p> <p>★★★★★</p>	
	3	 <p>Nikon Coolpix S7000 If small and light is the way you need to go, you can jam the affordable S7000 in your jeans and you won't even notice it's there. Yet it still packs a 20x optical zoom and back-illuminated 16MP sensor, as well as 4-axis stabilisation and Wi-Fi.</p>	<p>£120</p> <p>★★★★★</p>	
	4	 <p>Sony RX10 II Sporting a memory-attached sensor, this camera has the ability to record video at 1000fps or stills at 1/32,000 of a second – speeds usually reserved for pro kit. As an all-rounder with a non-interchangeable lens, there's no other model that can touch it.</p>	<p>£920</p> <p>★★★★★</p>	
	5	 <p>Panasonic Lumix FZ1000 The FZ1000 is incredibly versatile – a fixed-lens camera capable of shooting fantastic stills and video in almost any situation. Yes, it's almost the same as the Leica V-Lux, but at about £300 cheaper it deserves an extra star. A brilliant bridge camera.</p>	<p>£560</p> <p>★★★★★</p>	

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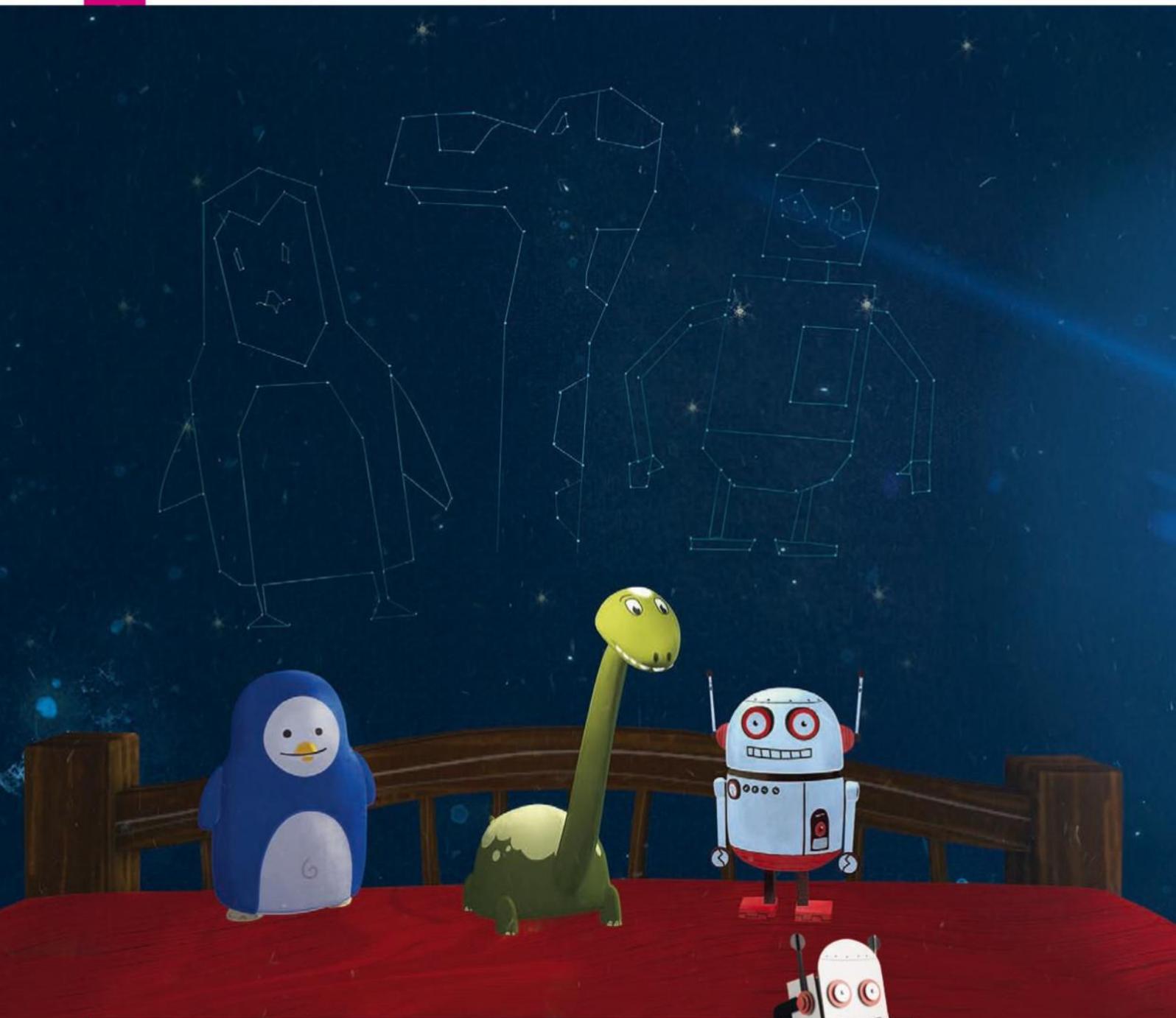
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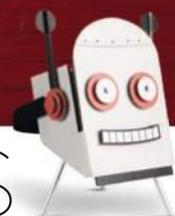
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BEDTIME VR STORIES



S

omething tells me Samsung's engineers don't have kids...

You mean, they have awesome kids who were born into a VR headset and have already completed *EVE: Valkyrie*. Sure, 'responsible' parents might say that getting a child to bed is hard enough without an ultra-vivid screen jammed into their faces. And even pro-VR parents might be concerned by the premise of over-stimulating young eyes and brains right before sleepy time. But imagine how much better your dreams would have been if you'd just been read *The Magic Faraway Tree* in VR...

So good I'd have had a magic, faraway look in my eyes at school the next day, no doubt.

There are worse things to have in your school report. Anyway, the aim of Bedtime VR Stories isn't to replace books. Samsung's pitch is that parents who can't be around for bedtime, whether off on a business trip or stuck at the office, can connect with their kids via virtual reality. Mum or Dad puts on the Gear VR headset wherever they are, while the kid puts on a cute Google Cardboard-like shell that holds a phone. Once linked, they share a dreamy and lightly interactive narrative journey together.

Cute? There's something a bit *The Wicker Man* about that headset...

OK, 'Jo the Robot' could star in its own horror film, but 'Jen the Penguin' and 'Dan the Dinosaur' are a lot friendlier than a standard Cardboard headset. And anyway, what's the alternative when you're away? Your sprog would surely go for Samsung's *The Most Wonderful Place To Be* adventure over seeing your jetlagged face wishing them goodnight via Skype. They'll have to make do with that for the time being, though, as Bedtime VR Stories is just a prototype that Samsung is testing with a few UK families.

[Words Andrew Hayward]

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BY DESIGN

NEW ROUTEMASTER BUS

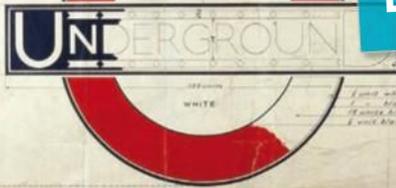


designology

Shaping London

Exhibition opens 20 May 2016

JOHNSTON
FONT



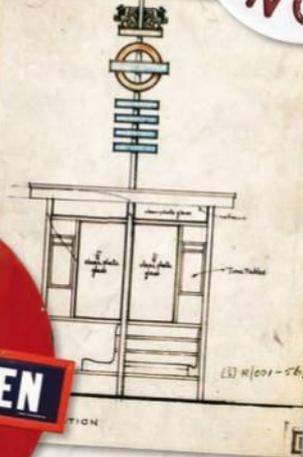
FILED LOGS
DRAWN: 287
Dwg No. B L1572



PUSH ONCE
BUS BELL



COVENT GARDEN



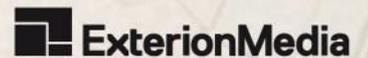
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Parrot BEBOP 2



PHOTO RAW 14 MPX

25 MIN FLYING TIME | FULL HD VIDEO STABILIZED ON 3-AXIS | 14.0 MEGAPIXELS | GPS FLIGHT PLAN | FPV COMPATIBILITY
500 G / 17.6 OZ SAFE AND LIGHTWEIGHT | WI-FI® MIMO EXTENDED RANGE 2 KM* WITH SKYCONTROLLER

Thanks to Alberto Navarro, Juhaidi Vaihkonen,
Oscar barba, Qorz & Robin Icare.
*Maximum range depends both on wireless settings
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Pilot with smartphone
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