

TEST BENCH

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BUDGET SAT NAVS

Low-cost hi-tech route to being a happy wanderer

Sat nav quality is improving fast, with more features and greater reliability, even in the cheaper models. We ask six to show us the way ahead

Diehard map readers used to have plenty of excuses to stick with their dog-eared atlases. The early top sat navs were as expensive as a second-hand car, and unreliable enough to guide you into a canal. That's no longer the case. Even the most affordable GPS sat navs now promise comprehensive mapping, intelligent voice direction and databases of speed traps (although we've yet to see a maker offering a money-back guarantee for anyone caught speeding). We found there are still big differences, though, especially in ease of use, speed of operation and clarity of guidance.

We've tested six of the most popular budget sat navs, costing from less than £100 to about £160. Most come pre-loaded with maps, speed trap warnings and points of interest for the UK only, although the Route 66 Mini also has European coverage. All have colour touchscreens and a rechargeable battery for when you're walking. All except the chunky RAC 215 are small and light enough to slip into a jacket pocket or handbag — leaving them on the dashboard can tempt thieves.

Speed camera data are usually offered free for between a month and a year, then cost £20-£30 annually. Updates are free for life for the RAC 215, while the Route 66 unit requires a full map upgrade (£40) to update its speed-trap locations.

Most motorists won't feel the need for voice-controlled

navigation or an ability to locate their driving buddies on a map — the kind of features you pay for when you buy an expensive sat nav. However, there are a few advanced functions worth paying extra for.

Only the TomTom receives (free) real-time traffic updates via the TMC radio system. It highlights delays and can recalculate routes automatically to avoid tailbacks. Plug-in TMC receivers for the Garmin (£30) and Navman (£50) are also available. None of these basic navigators has a Bluetooth connection for hands-free mobile phone use and none can play digital music, although the Garmin and Route 66 will display photos. Also, none will speak road names, instead relying on simple "turn left/right" instructions.

We asked each device to plot the shortest route between two points about 35 miles apart and ending in a recently built estate. This meant we could check how up-to-date the maps were and assess how well the sat navs coped with numerous turns in quick succession. We deliberately took three wrong turns — the best units (TomTom and Navman) calculated a new route within seconds.

The test route was littered with fixed speed cameras and sites commonly used for mobile traps. We noted how the warnings were given and whether we were alerted in good time. Ease of use was a must, and this meant finger-friendly touch menus. We also checked what points

JARGON BUSTER

GPS (global positioning system) American satellite system that can pinpoint (outdoor) receivers to within a few feet

POI (points of interest) Pre-programmed destinations such as petrol stations, cash machines and airports

Speed traps Locations of all known fixed (and some mobile) cameras nationwide. Payment is often needed for updates

TMC (Traffic Message Channel) A data service using FM radio signals that advises on traffic jams. Often requires a subscription

Reviews by James Baggott Prices include Vat but not delivery

of interest were included. All had a good selection, with the Garmin and TomTom providing the most comprehensive in terms of calibre and choice.

Finally, shop around. While last season's sat navs can often be found at low prices, an advantage to buying a new model is that it should come with the latest 2008 maps, showing new roads, one-way systems and housing estates. For anyone wanting to upgrade an older device, downloading this year's maps can cost a hefty £40 or more.



Sat navs such as our winner, the Navman S30, can be bought for less than £100

DASHBOARD DIVA ★★★★★



Navman S30 — typically £100, or £80 from www.amazon.co.uk

Superb performance, even better price

If you're after a unit that navigates effortlessly, this is it. The S30's display is well laid out with bright 3-D maps and clear icons. It displays not only the road you're on but also the nearest house number (a useful feature), and the spoken instructions are first class. It picked our favoured route and we liked the clear menu system and comprehensive points of interest, complete with miniature local maps. Excellent speed-camera location software (£35 a year — first year free) sealed the deal, showing bright yellow and black icons as well as the speed limit. However, the S30's maps are not as up to date as the Garmin's or TomTom's.

SIMPLY SMART ★★★★★



Garmin Nuvi 205 — typically £140, www.garmin.co.uk (available soon)

User-friendly with excellent navigation, but pricey

Choosing a destination with this brand new Garmin is easy, as the intuitive software "guesses" towns and road names as you type. It was the quickest to calculate a route for our test and chose our preferred (most efficient) course. Garmin has tweaked the screen layout on the 205 with corner displays of your next turn, arrival time and current speed. A handy "Where am I?" button displays your GPS co-ordinates and nearest address, as well as the closest petrol station, hospital and so on. Its speed trap software (£30 per year, just 30 days free) was accurate on all our test route sites.

ONE LOVE ★★★★★



TomTom One T V3.0 — typically £160, www.tomtom.com

World's bestselling sat nav unit gets a makeover

The latest version of TomTom's popular model has a new look and extra features, including technology to warn of traffic jams. A built-in TMC radio receiver picks up (free) information about tailbacks, and alerted us promptly to a motorway hold-up. The One T is more compact than previous models. It's fast and easy to set up and we liked the way it can walk you through a planned route (although the Garmin's address inputting is slightly easier). Thoughtful extras include excellent speed camera data (£20 annually, first year free) and even a guide to basic first aid. Not cheap, though.

SPEED FREAK ★★★☆☆



Magellan RoadMate 1200 — typically £100, or £70 from direct.tesco.com

Fast software let down by an annoying voice

This trim sat nav has clear, easy software that allows quick address entry, a sensitive touchscreen and rapid operation. It chose the same route as the TomTom and quickly recalculated after a wrong turn. Particularly clever was its point-of-interest feature that searches for restaurants by food type. But the screen was poor in sunlight, and two speed cameras were missed. The spoken instructions annoyed. It would say: "Prepare to turn left," but would then only beep at the point of turn, and its on-screen directions were hard to read. You get three months of speed camera updates, after which it's £30 a year.

EURO VISION ★★☆☆☆



Route 66 Mini — typically £120, from www.66.com

Improvement on past models, but still poor

The Mini comes with full European maps and looks smarter than Route 66 units of previous years. Spoken instructions are given in good time and the unit chose our preferred route. However, the Mini takes longer to lock on to satellites than rivals (four minutes compared with about 30 seconds) and the map display judders when you're moving. The screen is confusing to navigate, inputting destinations can be fiddly and the display is fussy and over-complicated. Road names are too small to read on the move and it missed two fixed speed cameras during the test.

ROAD KILL ★☆☆☆☆



RAC 215 — typically £120, or £102 from www.laskys.com

Big screen, but performance needs rescuing

Sporting the largest screen on test, this RAC unit promised a lot. Larger displays usually improve ease of use, as on-screen instructions are bigger and touchscreen icons are less fiddly. However, the RAC's graphics haven't been scaled up to match: road names are small and icons are too tiny to be user-friendly. The software ambled slowly between screens, struggled to calculate routes, and at one point forgot where it was, forcing us to enter our destination again. The final blow was when its speed camera software (thankfully, free) invented a trap that didn't exist.