

Ten things you should know about GPS units



What are the key features you need in your GPS unit?

Photo: Reuters

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March 15, 2008

The market for in-car satellite navigation has shifted up a gear from the high-tech systems built directly into luxury cars to a thriving mass market dominated by portable car units that retail from \$300.

What follows is a list of the top 10 features of an in-car satellite navigation system that might serve as a useful cheat-sheet for buyers. The list applies principally to portable in-car navigation solutions from traditional manufacturers such as TomTom, Navman, Mio and Garmin.

1. Mapping data

Mistakes in GPS mapping data are the subject of numerous tales of ridicule in which hapless owners of navigation systems drive into a lake or the wrong way up a motorway after mindlessly following the voice prompts.

While this is an extreme scenario, most road systems are in a constant state of flux, so drivers will benefit from having the most current maps while allowing for the fact that mistakes are still bound to crop up.

Accuracy is often sold as a key feature of navigation systems, but the fact is that most of the popular devices on the market in Australia rely on local mapping data supplied by Sensis - until

recently the only supplier to the local market. The arrival of new entrant Navteq will inevitably bring an injection of new blood into the market, but it is important to check how much you will have to pay for map updates and whether you can easily obtain maps for travelling overseas.

Most units give you a number of options to allow you to avoid toll roads or congested areas in advance as well as calculating new routes on the fly should you encounter a traffic jam or other delay.

2. Voice capabilities

Turn-by-turn voice commands have become the standard for all in-car navigation systems primarily because they remove the distraction factor of looking away from the road ahead.

They provide the user with basic guidelines on whether to go left, right, or straight ahead during their journey and some even offer verbal alerts such as when you are travelling over the speed limit or are approaching a red-light camera.

If you are growing tired of the very polite voice inhabiting your GPS, novelty and celebrity voice skins are available to users of TomTom units - on sale either from the manufacturer itself or from the nascent third-party market which peddles a wide array of celebrity impressions from the likes of Elvis, the Queen and Marilyn Monroe.

For those looking for more functional voice upgrades, forking out a little extra cash will fund the more sophisticated text-to-speech capabilities currently inhabiting products at the top end of the market which will read out street names.

3. Screen

When it comes to GPS displays, bigger generally costs more among established brand line with sizes ranging from about 8cm to 11cm. The bigger the screen, the easier it will be for you to key in addresses and check out the map at a glance.

The actual mechanics of attaching the unit to the windscreen (generally using a suction cup) should be foolproof but some units do fall short in this regard. Likewise, investigate ease of use of the unit - especially if the simple task of programming directions involves accessing numerous menus and keystrokes.

Different units also vary in how much information they attempt to display on the screen, but too much can compromise the core mapping data.

An appealing feature is the ability to switch from a 2D to a 3D mode, as is an automatic switch between day and night displays based on the GPS's own internal clock.

4. Battery life

Unlike hand-held GPS systems which tend to have a long life, in-car systems typically have no more than two to five hours battery life. The fact that most of these are powered and recharged by the car's own internal cigarette lighter means this should only become an issue if the user wants to use the unit extensively in pedestrian mode.

5. Bluetooth speaker phone connectivity

This was once a feature associated only with high end devices but is becoming increasingly commonplace. Bluetooth enabled navigation systems integrate the wireless technology into their own microphone and speakers, allowing them to act as a hands-free system for a compatible Bluetooth phone. Many can also synchronise with contacts stored on Outlook to allow you to make in and out-bound calls through the GPS address book - which is a handy little feature if you don't already have a hands-free system for your car. If you are paying extra for Bluetooth functionality, you may like to check that sound quality of the unit meets your expectations.

6. Music player/photo viewer

Rapidly moving from the high end into more standard units, features such as an integrated music player and photo display may sound like tempting add-on applications. Bear in mind though that most navigation systems can only run one application at a time. This means the navigator may have to be disabled for you to enjoy your favourite tunes and snaps.

On the upside, having a stash of photos loaded into your GPS can stand in as a mini-album to show friends far afield, and the music player might also come into its own on a long journey when you don't need to navigate. Worth considering however, is whether the sound quality of music played through the unit itself is adequate, whether you can set it up to play tracks directly from your MP3 player, and whether you can route it through your car stereo.

7. Video player/camera

The ability to play video is right up there at the very sharp end of the market but screen picture quality, video formats and options for transferring content should all be investigated to determine whether this function is suitable for viewing your TV shows or movies.

The addition of a camera in the device may seem superfluous to those who already own a good quality digital camera but some GPS devices are giving a whole new meaning to location-based photography which can create powerful new mapping resources when combined with a process called geotagging (see below).

8. Geotagging

This is a high end feature now showing up in some devices which adds geographical metadata such as latitude and longitude coordinates to images taken at a specific location and might include location-specific data such as a restaurant review.

Navman's NavPix gives users the option of navigating via images. You need only take photo with their device and it is automatically stored with the location data - and by tapping on the photo at a later date you can navigate directly back to the same spot. Users can also share images with other Navman users or download them from a central database.

9. Customisation and community

To date, only TomTom units are able to upload novelty voices and users can also create and share their own voice impressions, screen icons and suggested improvements in mapping data.

Garmin is harnessing community spirit in a different way with its POI Loader which allows users to share knowledge and directions to points of interest such as restaurants, hotels, post offices, and emergency services.

Navman gives its users the option of sharing geotagged images (see above) with other Navman users.

10. Live traffic data

Live traffic data that warns drivers about traffic accidents, detours and other disruptions is now live in Melbourne and is expected to arrive in Sydney late next month. The Transport Management System (TMS) is being rolled out by a number of providers and the most advanced is the SUNA Traffic Channel.

It is only a matter of time before all GPS vendors embrace this new traffic channel and many units already include hardware that supports it. Those that do are called "TMS ready" however some vendors are charging owners of TMS-ready units extra to subscribe to the channel while others plan to bundle the feature directly into their new product ranges.