

# READY NET GO ... NEWS

September 2007

<http://www.readynetgo.net>

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## Tip of the Month

### Google Earth

If you like to travel or explore new places, Google Earth is a must have program. It allows you, from the comfort of your easy chair, to visit, zoom in on, and navigate places on Earth and beyond.

Through **high resolution, aerial and satellite imagery**, Google Earth gives anyone the opportunity to see images once reserved for only a select few.

One main drawback that has surfaced is the privacy issue given the level of detail that Google Earth images convey. One can zoom in on street level nearly anywhere in the world (that has been mapped). All technologies have a potential dark side but clearly Google Earth has incredible potential for researchers, teachers, general consumers and countless business applications.

One of the most intriguing benefits of Google Earth is the ability of lay people to **input data via GPS devices** to continue expanding the breadth and scope of the available maps.

For specific information on how to use your GPS device with Google Earth, visit:

[http://earth.google.com/userguide/v4/ug\\_gps.html](http://earth.google.com/userguide/v4/ug_gps.html)

For an overview of the program, visit:

<http://earth.google.com>

## GPS Navigational Devices

You're stuck in traffic and forgot your maps. Wouldn't it be great if you had a personal assistant who could help you navigate around and get you to your destination quickly? If you had a GPS device, your problems would be solved. GPS is revolutionizing our world in that it allows us to be confidently mobile and gives us the ability to be extremely precise in calculating time, distance and location.

### What is GPS?

GPS or **Global Positioning System** is a series of 24 satellites placed in orbit around Earth that enable people to monitor their location anywhere on Earth. Originally devised by the military, GPS was formally launched in the 1970s and became fully functional in the 1990s.

For GPS to work effectively, the receiver (device on Earth) must be in contact with at least three satellites. When a signal is required, the receiver locates three or more satellites via radio waves. It then records the distance to each satellite and the time it takes for each signal to reach the receiver. With these two calculations, the receiver can calculate its precise location on Earth (a process called trilateration or triangulation).



In this example, the location where the lines intersect is the location of the receiver (somewhere off the coast of Brazil). GPS receivers in conjunction with software maps can pinpoint your location to within 10 meters (~ **30 feet**) or less.

## WWW (Websites Worth Watching)

1. [www.greenfestivals.org](http://www.greenfestivals.org) – Green Festival October 6<sup>th</sup> & 7<sup>th</sup> at the Washington Convention Center in Washington DC
2. [www.feastivitiescatering.com](http://www.feastivitiescatering.com) – Need an event catered in the Philadelphia area? Check out Feastivities

## Where is GPS used?

Vehicle navigation	Emergency vehicles	Law enforcement
Boating / Aviation	Hiking / wilderness travel	Sporting events / Training
Off-roading	Military	GPS Surveying / Mapping
Farming	GPS Timing applications	Geocaching
Animal tracking	Financial systems	Astronomy / Sciences

The following website lists excellent examples of uses for GPS applications:

<http://www.trimble.com/gps/gpswork.shtml>

Although there are a lot of uses for GPS, handheld devices are becoming the most common so we'll go over some of the more important features to look for when doing your research.

## Important Features of Portable GPS Devices

Depending on your need (car navigation or hiking), you'll want different features. This list is a good starting point for assessing specifications for each activity. Now that more people are purchasing GPS units, the technology is improving and the costs are coming down.

- **Voice control** (synthesis/recognition) – for receiving directions audibly rather than just visibly on the screen
- **2-D or 3-D maps** – especially useful for hiking
- At least 2 GB of RAM – to store maps and other files such as .mp3 or video files
- **Long battery life** – 5 hours or more
- **FM traffic alert** receiver (if you live in a city) – usually subscription based
- **Size/Weight** – Bigger screen makes reading maps and directions easier but larger size usually means more weight. “Weigh” the two options and find your comfort spot.
- Some software will allow you to **update inaccurate information** so that maps can be constantly improved. For instance, if you come to a road that dead-ends, upload this information and the software will send out verified updates to all of their customers so others won't have the same hassle. [e.g. TomTom's Map Share software]
- **High screen resolution** - easy to read in bright sunlight
- **Secure locking mechanism** for vehicle mount applications
- **External volume controls**
- **Lifesaver function** – alerts you to the nearest hospital, police station, gas station or car service center



Garmin Nuvi 350 ®



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