

Re: Third party applications on GPS receivers

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- *From:* "Chris" <chtidio@xxxxxxxxxxx>
 - *Date:* Fri, 26 Oct 2007 11:42:14 -0400
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"bharath" <bharath.0523@xxxxxxxxxx> wrote in message
<news:1193386222.262080.245880@xx>

On Oct 24, 7:23 pm, "Pieter" <pvcl@*nospam*plitch.com> wrote:

I assume you mean "will 3rd party applications running on a PC interface to all GPS receivers?" My answer is a qualified yes. Here's why

There is one set of PC applications that will not interface to all receivers – this class of applications are those written by a GPS manufacturer to support functions like the installation of detail maps on their own receivers. For example, Garmin has their mapping software, Magellan their own too (MapSend Topo, for example), and the two will not interface to the other manufacturer's GPSs.

There is another class of 3rd party software which has interfaces for many GPS receivers built in. An example of this is "OziExplorer", a popular mapping program. The user can select from a great many models of GPS so that waypoint and track files may be easily transferred. Note that this class of 3rd party application will likely not install detail maps in the GPS, just move track, waypoint, and route files back and forth.

There is yet another class of 3rd party application that uses, as you suggest, the NMEA data stream to provide position, heading, and speed information. This class is often called "moving map" software, and "OziExplorer" can also operate in this mode if necessary. This is often a one-way street; the GPS sends position info to the software.

To confuse matters more, over the years manufacturers have developed proprietary extensions to the NMEA protocols (new "sentences") to add functionality, but these are only supported by some software that uses the NMEA data stream. The extensions allowed such operations as file transfers which are not part of NMEA protocols.

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So depending on the degree of functionality required, it is possible to interface almost any GPS to 3rd party software. A "pure" NMEA data stream offers limited information about position (but maybe that's all you need) and is the most likely to be universally understood. In the middle are the 3rd party programs with built in file transfer (and perhaps NMEA) interfaces which can be used for route planning and track plotting. These will likely have built in file and NMEA interfaces for most popular GPSs. At the top of the functionality food chain are the proprietary programs which can change basemaps or detail maps as well as do the other functions listed above. These are the least likely to have interfaces to multiple brands.

This is, perhaps, an oversimplification, but I hope it in part answers your question.

"bharath" <bharath.0...@xxxxxxxx> wrote in message

news:1193231314.170365.135390@xx

Hi,

I would like to know whether all GPS receivers support third party applications. Since the protocol supported by most of the receivers is the same(NMEA) will an application developed to read lat/long data from one GPS receiver work on other GPS receivers too?

Thanks
bharath– Hide quoted text –

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Thank you all for your valuable reply. I have one more query, how does

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the application interact with GPS devices with different interfaces, like USB, bluetooth.

Some applications and devices use proprietary means, but most of them communicate through an internal virtual COM port, regardless of how they physically connect to the computer.

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