

TELETYPE GPSDRIVER.DLL

Overview

GPSDRIVER.DLL reads the NMEA output of GPS receivers (TeleType GPS Receiver ONLY) and makes the incoming data available to other programs. This DLL also has the ability to send positional information via email. It is a Win32 DLL, and it can be compiled into WinCE DLL without changing any source code.

How to use

Include “gpsdriver.h” to your source code.

You must call `TTGPS_StartReading(...)` to open a port to the GPS receiver, read GPS data and parse GPS data. Before you call this function, you should define a Windows message to notify the main window when there is any new GPS data. For example:

```
#define WM_NEWGPSDATA WM_USER+1
```

Pass the desired window handle and the Windows message (eg. `WM_NEWGPSDATA`) to `TTGPS_StartReading(...)`. Also pass a filter value (defined in “gpsdriver.h”) to `TTGPS_StartReading(...)` to select after which data updates you want to be notified.¹

When the window of your main application receives the Windows message, you can call `TTGPS_GetPositionalData(...)`, `TTGPS_GetSatelliteData(...)`, `TTGPS_GetErrorData(...)`, or `TTGPS_GetExtendedData(...)` to read out GPS data. `PositionalData`, `SatelliteData`, `ErrorData` and `ExtendedData` are structures defined in the “gpsdriver.h” file.

`TTGPS_StopReading(...)` is called to close the port and un-register windows before windows are destroyed. `TTGPS_StopReading(...)` is also called by `DllMain` when the DLL is being detached from the process.

GPSDRIVER.DLL also provides the ability to log the serial output of the GPS receiver to a specified file by calling `TTGPS_StartLogging(...)` and `TTGPS_StopLogging`. Only one file can be written at once.

`TTGPS_ShowEmailDlg(...)` displays an Email dialog box and sends email to any valid email address. The GPS position (longitude, latitude, etc) shows in the subject line (see Figure 2).

When the library unloads, it automatically closes the status window (if the window exists), shuts down the I/O thread, releases all port resources, and closes all log files.

¹ If your application wants to create a window to show GPS status and output GPS data (see Figure 1), you may call `TTGPS_CreateStatusWnd(...)` when your application is launched. `TTGPS_CreateStatusWnd(...)` creates a tray icon on the Windows task bar. Clicking the tray icon shows or hides the GPS status window you created. The status window automatically calls `TTGPS_StartReading(...)`.

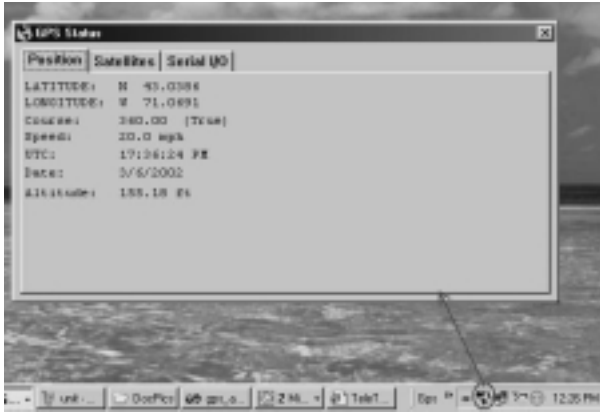


Figure 1 Tray Icon and GPS Status Window



Figure 2 GPS Position in the subject line