GPSTIME

GPSTIME communication utility

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Description

The **gpstime.exe** program is used for setting the PC system time according to the time received from the GPS satellite system. The program supports STU-GPS devices (Incos Žilina) and GPS receivers supporting the NMEA 0183 communication protocol (tested on Garmin GPS 35). The request for synchronization of time difference that is greater than 3600 seconds will be ignored.

Parameters

Command line parameters:

gpstime PortNr [W] [E] [L] [U] [NMEA]

Parameter	Meaning
[PortNr]	Number of the serial port, which the GPS receiver is plugged in.
[W]	If the detected time difference is greater than 1 second, there will be performed correction of the system time according to the GPS receiver time.
[E]	Having corrected the system time, the program is to be terminated immediately. If correction is not necessary, the program will be terminated in 30 seconds.
[L]	Daylight saving time correction - adding +1 hour to a time received from the GPS receiver.
[U]	Correction - UTC (Coordinated Universal Time)> UTC+1 (Central European Time).
[NMEA]	The receiver communicates by means of the NMEA 0183 communication protocol. If the parameter is not defined, there is assumed the communication with a Incos STU-GPS device.
[Sxxxx]	Allows to change the predefined serial port baud rate. For STU-GPS - the predefined baud rate is 9600 Bauds, for NMEA 0183 protocol based device - the predefined baud rate is 19200 Bauds. Possible values: S110 S300 S600 S1200 S2400 S4800 S9600 S14400 S384400 S38400 S56000 S157600 S115200 S115200 S115200 S128000 S2560000
LOG_INPUT_DATA	Full listing of communication between gpstime and GPS receiver in case of NMEA protocol.
DO_NOT_CHANGE _SYSTIME	Program executes all activities except for the time correction (unlike the parameter W, when it does not communicate with GPS receiver).

Program logs

In the work directory of the gpstime program directory, there is automatically generated the file **gpstime.log** containing program activity logs:

- program start/stop
- time correction

Each log contains the date and time when occurred.

NMEA receiver settings

When you use receivers supporting the NMEA 0183 communication protocol, the following parameters are required by the gpstime program:

- Baud rate of 19200 (unless there is defined other baud rate using the parameter Sxxxx).
 enabled NMEA sequences GGA (Global Positioning System Fix Data) and RMC (Recommended Minimum Specific GPS/TRANSIT Data)

Changes and modifications

• Program version 1.2 - July 24th 2001 - NMEA 0183 support.

Document revisions

• Ver. 1.0 – July 24th 2001 – document creation.



Related pages:

Communication utilities