## Möglichkeiten zur Ermittlung der deutschen Normzeit

## Zitat

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## Computeruhr mittels GPS-Empfänger stellen



u-blox GNSS-Treiber und COM-Port im Gerätemanager

BitTimeSync by IZ2BKT - Venion 1.13.3         Internet Configuration         NTP server       p1b1me1.pbb.de         GPS Configuration         Server       Server         GPS Configuration         Serial Port :       COM6 × BAUD : [9000 × Bit : 8 Bit of Stop 1 Parity : N ×         RTS :       COM × BAUD : [9000 × Bit : 8 Bit of Stop 1 Parity : N ×         RTS :       COM × DTR :       OTR :         Amys connected to the GPS       IF       Disconnect GPS         Coordinates :       Stif SF / Disconnect GPS       Protocal : NMEA × Enable GPS         VSJT X       Amys connected to the GPS       IF         Coordinates :       Stif SF / Disconnect GPS       Protocal : NMEA × Enable GPS         VSJT X       Amys Connected to the GPS       IF         Coordinates :       Stif SF / Disconnect GPS       Protocal : NMEA × Enable GPS         VSJT X       Amo Grd I       Port : 2:227       IP : 127.0.0.1       Send WW Locator         General Options       Start on system tray       Sync on startup       IF         Sync every       G       minutes (0 to manual sync) to second Q       If error hTP bry to use GPS F         Max corv.       12 hours (0 = Do not check the date I       Onecks updates every       Gays (0 to disable)         Di		
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Programmfenster von BktTimeSync

Wie im Beitrag ausgeführt, empfiehlt es sich speziell bei tragbaren Computern, die nicht dauerhaft ans Internet angeschlossen sind, die Uhrzeit, sofern exakt benötigt, mittels GNSS-Empfänger einzustellen. Hier haben wir gute Erfahrungen mit dem NL-8002U von <u>Navilock</u> gemacht, in dem der Empfänger u-blox 8 der Schweizer Entwicklungsfirma <u>u-blox</u> verbaut ist. Den Empfänger gibt es mit 1,5 m und 4,5 m Kabellänge. Es genügt, den Empfänger in der Nähe einer Gebäudeöffnung (etwa einem Fenster) zu platzieren, dann hat er i.d.R. außreichend Empfang – zumindest, um die Uhrzeit einzustellen. Wir haben die Hard- und Software bislang überwiegend unter Windows 10 getestet, wo sie sich einwandfrei installieren lässt.

Die Treiber sind auf der Navilock-Site unter Service>Treiber>Empfänger (nicht Module) herunterzuladen, wo man »unsere« GNSS-Maus unter ihrer Produktbezeichnung NL-8002U (Art.-Nr. 62523) findet. Für uns haben die beiden älteren Treiberversionen (20170125DriverX86X64.exe für den Sensor und 20170124DriverX86X64.exe für den COM-Port) funktioniert. Vor der Installation dem COM-Ports das System zur Sicherheit neu starten. Der GNSS-Empfänger ist nach der Treiber-Installation im Gerätemanger unter Sensoren zu finden. Für den Einsatz des Programms BktTimeSync benötigt man zusätzlich einen logischen COM-Port, der zusätzlich von der Navilock-Site heruntergeladen und Installiert werden muss. Nach der Installtion dieser Treiber findet man die GNSS-Maus im Gerätemanager (Systemsteuerung) unter Sensoren>u-blox Universal GNSS und den COM-Port unter Anschlüsse (COM & LPT)>u-blox Virtual COM Port (COM6) wobei die Bezeichnung in der Klammer am Ende auch die Nummer des COM-Ports identifiziert, der in den Programmen, u.a. BktTimeSync, einzustellen ist.

Das Programm <u>BktTimeSync</u> findet man auf der Entwickler-Site. Die obligatorischen Warnhinweise betreffend nicht signierte Software habe wir bei der Installation ignoriert, ohne Nachteile zu erleiden. Nach dem Start des Programms das Kontrollkästchen *Enabble NTP* (oben rechts) deaktivieren, den richtigen COM-Port einstellen (wie im Gerätemanager angegeben) und die Schaltfläche *Sync Now* drücken.

Um die weiteren Funktionen des GNSS-Empfängers zu testen, gibt es auf der Website u-blox das Programm u-center. Für den im Empfänger verbauten Chipsatz benötigt man das u-center 2 nicht, das im Browser läuft und eine Registrierung aus der u-blox Website verlangt.

Achtung: Der Parallelbetrieb von BktTimeSync und u-center ist nicht möglich, weil beide

Programme exklusiven Zugriff auf den COM-Port benötigen.