

GPSFox Quick Guide

Version 1.7

2018/09/18

The logo consists of the word "LOCOSYS" in a bold, white, serif font, centered within a solid orange rectangular background.

LOCOSYS

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Getting Started

System Requirements :

To use GPSFox on a Windows PC, you must have at least the following:

- **Operating System :** Windows XP, Windows 7, or Windows 10
- **CPU:** Celeron 1.6GHz or above
- **System Memory (RAM) :** 2048 MB RAM and above
- **Hard Disk :** 50MB free space
- **Screen :** 800x600, "16-bit High Color" screen
- **Internet:** 802.11a/b/g/n/ac or Ethernet

Installation :



Make sure the driver for USB has been successfully installed on your host PC/Notebook, and just copy GPSFox.exe to a new empty folder on your hard disk .Create a shortcut on desktop if necessary.

(The USB driver can be downloaded from our website: <http://www.locosystech.com>)

Uninstallation :

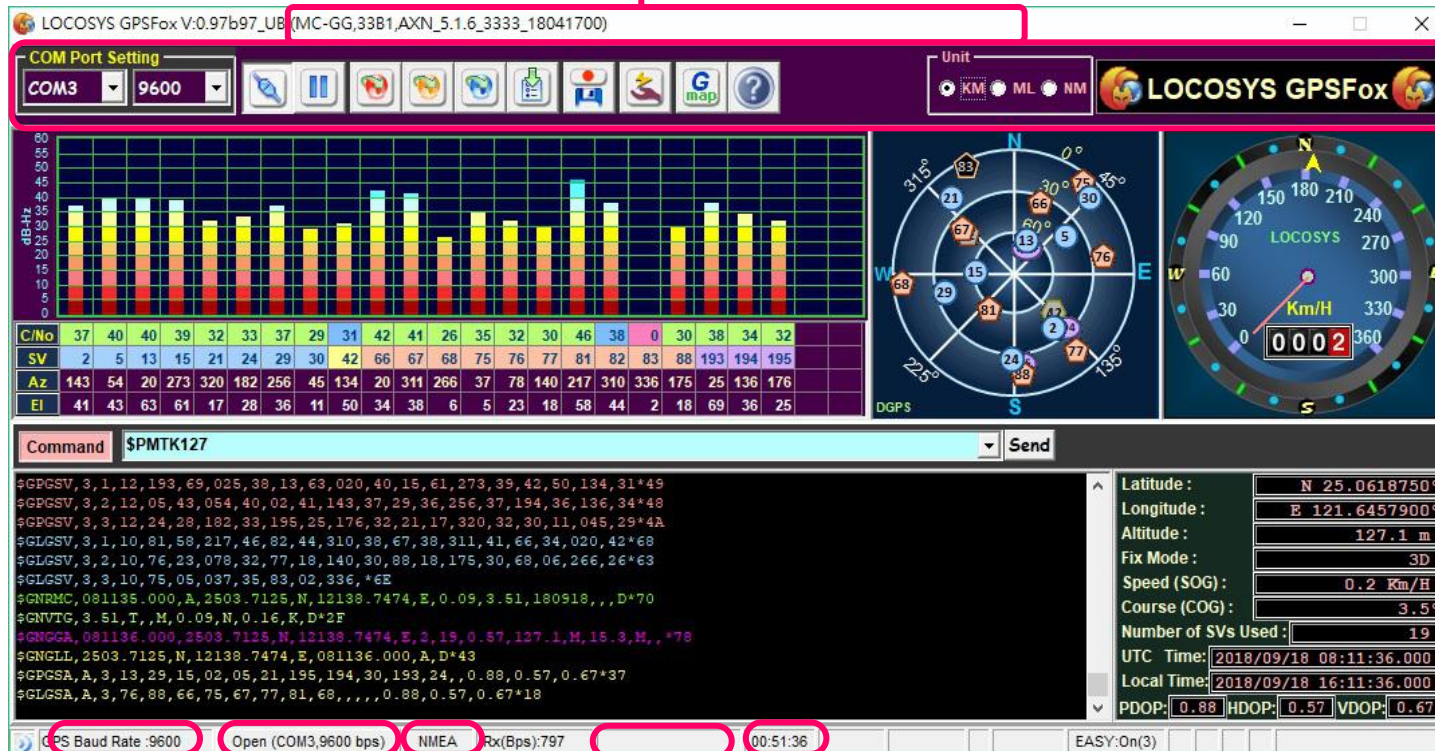
This program does not add any key to system registry. If you don't want it to keep it no more , just delete the provided files and its shortcut from your hard disk.

Launch GPSFox

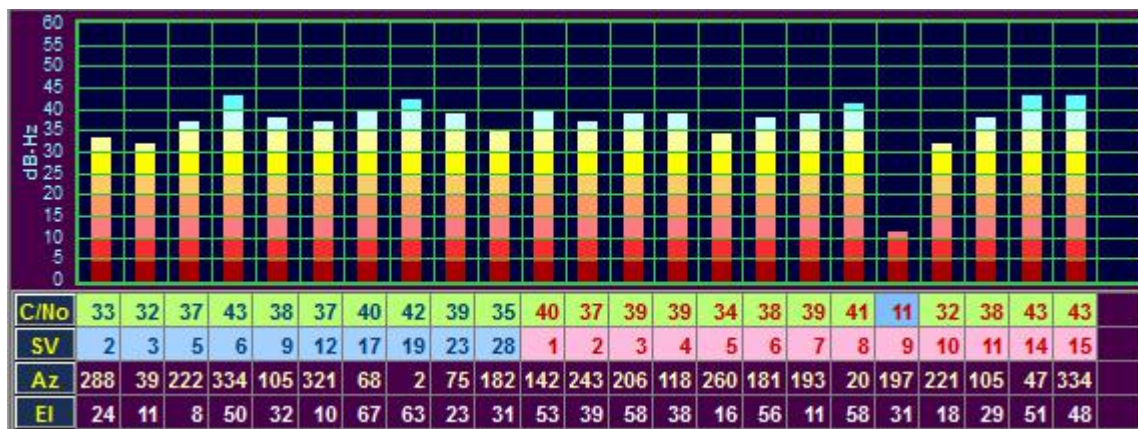
1. Double click on the GPSFox.exe or the GPSFox's shortcut  on windows desktop.
2. Select the "COM Port" and "Baud Rate" apply to the host PC.
3. Click "Connect to GNSS"  and then the NMEA output messages will display in the NMEA View.

The GPSFox is an easy-to-use utility which can display graphically specific NMEA 0183 message received from GNSS receiver. There are five information areas, one function bar and some status indicators in the main form.

GNSS Receiver firmware version

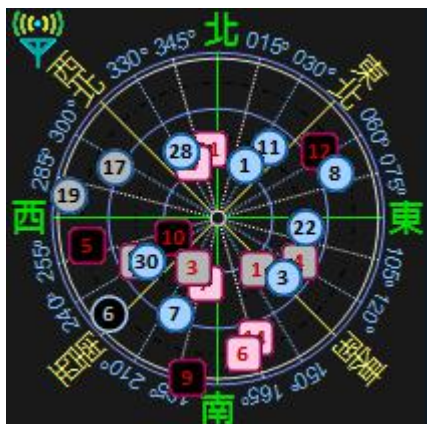


✦ Signal Level View



The **Signal Level View** displays the satellite number(SV), azimuth(Az), elevation(El) of tracked and available satellites in a text form. It also shows the C/N0 value in both text and graphical forms.

✦ Radar View



The **Radar View** displays the azimuth and elevation of tracked and available satellites in a graphical form. The color of the satellite status is:

Type	Description
Solid with Same Color	Satellites being used in the position solution
Solid with Gray Color	Satellites being tracked but not used
Hollow	Satellites that are not tracked and are not used in the position solution

Icon	Description
	Active antenna connected
	Antenna short
	Active antenna not connected

★ COG&SOG View



The **COG&SOG View** displays the GNSS speed and direction in a graphical form. There are three measurement systems can be shown: Metric (Km), Imperial (Mile) or Nautical Mile (Knot). You can select the unit of measurement in the Unit selection box on **Function Bar** by click the item of Km, Mile or Knot.

★ NMEA View

```
$GPGLL,2503.7150,N,12138.7445,E,033806.000,A,D*5E
$GPGSA,A,3,24,26,21,09,18,29,27,10,15,,,1.29,1.00,0.82*09
$GPGSV,3,1,11,24,71,193,45,27,68,078,42,09,62,174,37,26,58,347,45*70
$GPGSV,3,2,11,42,54,141,38,21,52,303,44,15,47,023,43,18,25,313,41*7F
$GPGSV,3,3,11,10,25,093,40,29,15,224,37,12,04,168,*46
$GPRMC,033806.000,A,2503.7150,N,12138.7445,E,0.03,0.00,040509,,,D*62
$GPVTG,0.00,T,,M,0.03,N,0.06,K,D*3D
$GPGGA,033807.000,2503.7150,N,12138.7445,E,2,9,1.00,128.8,M,15.3,M,0000,00
$GPGLL,2503.7150,N,12138.7445,E,033807.000,A,D*5F
$GPGSA,A,3,24,26,21,09,18,29,27,10,15,,,1.29,1.00,0.82*09
$GPGSV,3,1,11,24,71,193,45,27,68,078,42,09,62,174,37,26,58,347,45*70
$GPGSV,3,2,11,42,54,141,38,21,52,303,44,15,47,023,43,18,25,314,41*78
$GPGSV,3,3,11,10,25,093,40,29,15,224,37,12,04,168,*46
$GPRMC,033807.000,A,2503.7150,N,12138.7445,E,0.01,0.00,040509,,,D*61
$GPVTG,0.00,T,,M,0.01,N,0.03,K,D*3A
```

The **NMEA View** displays the original NMEA messages received from GNSS receiver. If you want to clear the content of **NMEA View**, just right-click in **NMEA View** area and click the **Clear** item on popup menu.

✦ Navigation View

Latitude :	N 25°03'42.815"
Longitude :	E 121°38'44.810"
Altitude :	120.1 m
Fix Mode :	3D
Speed (SOG) :	0.1 Km/H
Course (COG) :	39.5°
Number of SVs Used :	21
GPS Time:	2016/07/06 10:47:14.000
Local Time:	2016/07/06 18:47:14.000
PDOP:	1.07
HDOP:	0.62
VDOP:	0.88

The **Navigation View** displays the primary navigation information, the units of measurements are determined in the Unit selection box.

Fix Mode	Description
not Fix	Fix not available
2D	2D (<4 SVs used)
3D	3D (>3 SVs used)

✦ Function Bar

The Function Bar contains the following controls and icons:

- COM Port Setting:** A dropdown menu showing 'COM3' and a baud rate of '9600'.
- Navigation Icons:** A series of icons for various functions: a blue arrow (Select COM port), a red arrow (Connect/Disconnect), a green arrow (Hot start), a yellow arrow (Cold start), a red arrow (Factory reset), a green arrow (Warm start), a red arrow (Pause NMEA), a blue arrow (Log NMEA), a blue arrow (Update AGPS), a blue arrow (Google Map), and a blue question mark (About).
- Unit Selection:** Radio buttons for 'KM' (selected), 'ML', and 'NM'.
- LOCOSYS GPSFox:** The application logo.

Annotations for the Function Bar:

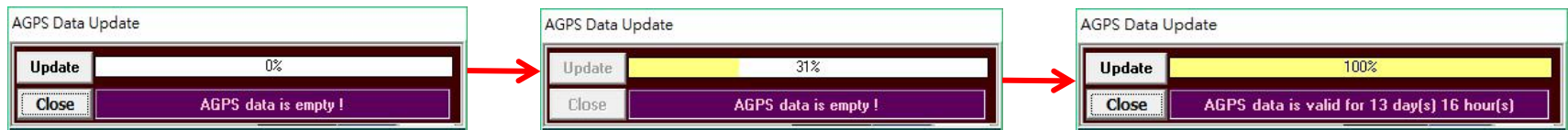
- Select the COM port with the property baud rate which is connected to GNSS receiver
- Connect/Disconnect with the GNSS receiver
- Perform a hot start command
- Perform a cold start command
- Perform a factory reset command
- Unit selection box
- About the GPSFox
- Link to Google Map
- Update AGPS Data
- Start/Stop to log the NMEA data
- Performs a warm start command
- Pause the NMEA View



About the GPSFox :



: Update AGPS data



Clicks the AGPS button for updating EPO data. If AGPS function is enabled, GPSFox has automatically upload AGPS data to GNSS receiver. Therefore, the TTFF of cold start or warm start with AGPS will faster than them without AGPS aiding.

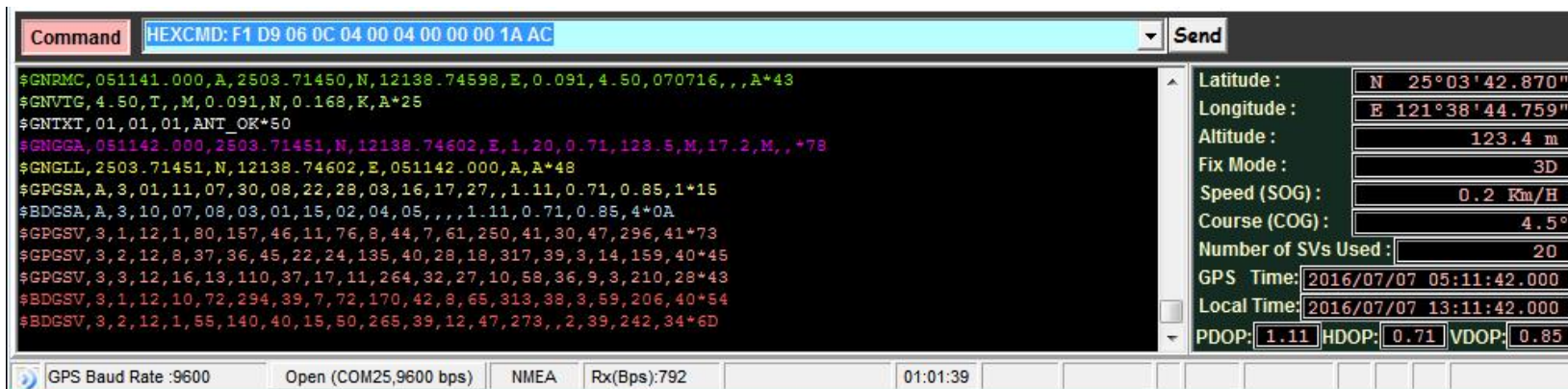
Desktop or labtop PC needs to connect with Internet when you evaluate the AGPS function.

GNSS Receiver's Firmware version

LOCOSYS GPSFox V:0.97b97_UB (MC-GG,33B1,AXN_5.1.6_3333_18041700)

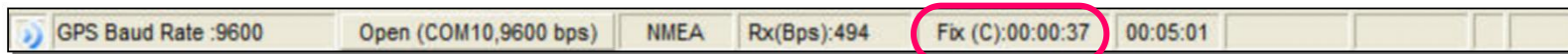
The firmware version can be found after left top LOCOSYS GPSFox's logo & version

Command line Support:



The version GPSFox can support manual input command. You need to call a hidden command line out. Hold Ctrl key and use mouse to click top right GPSFox logo. An input window will prompt up. Key in “**Commandbox**” then clicks okay button. A hidden command line will come out.

You can use the command line to input HED proprietary binary command. Before you input HED binary command you should key in “**HEXCMD:**” for GPSFox accepting.



If you perform a Hot/Warm/Cold Start command, the information of TTFF(Time To First Fix) will display on the TTFF panel.