

GPSFox

Quick Guide

Version 0.8

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 2000 or Windows XP
- **CPU:** 500Mhz, Pentium 3
- **System Memory (RAM) :** 128MB RAM
- **Hard Disk :** 50MB free space
- **Screen :** 1024x768, "16-bit High Color" screen

Installation :



No installation is required. Just copy GPSFox.exe to a new empty folder on your hard disk .

Create a shortcut on desktop if necessary.

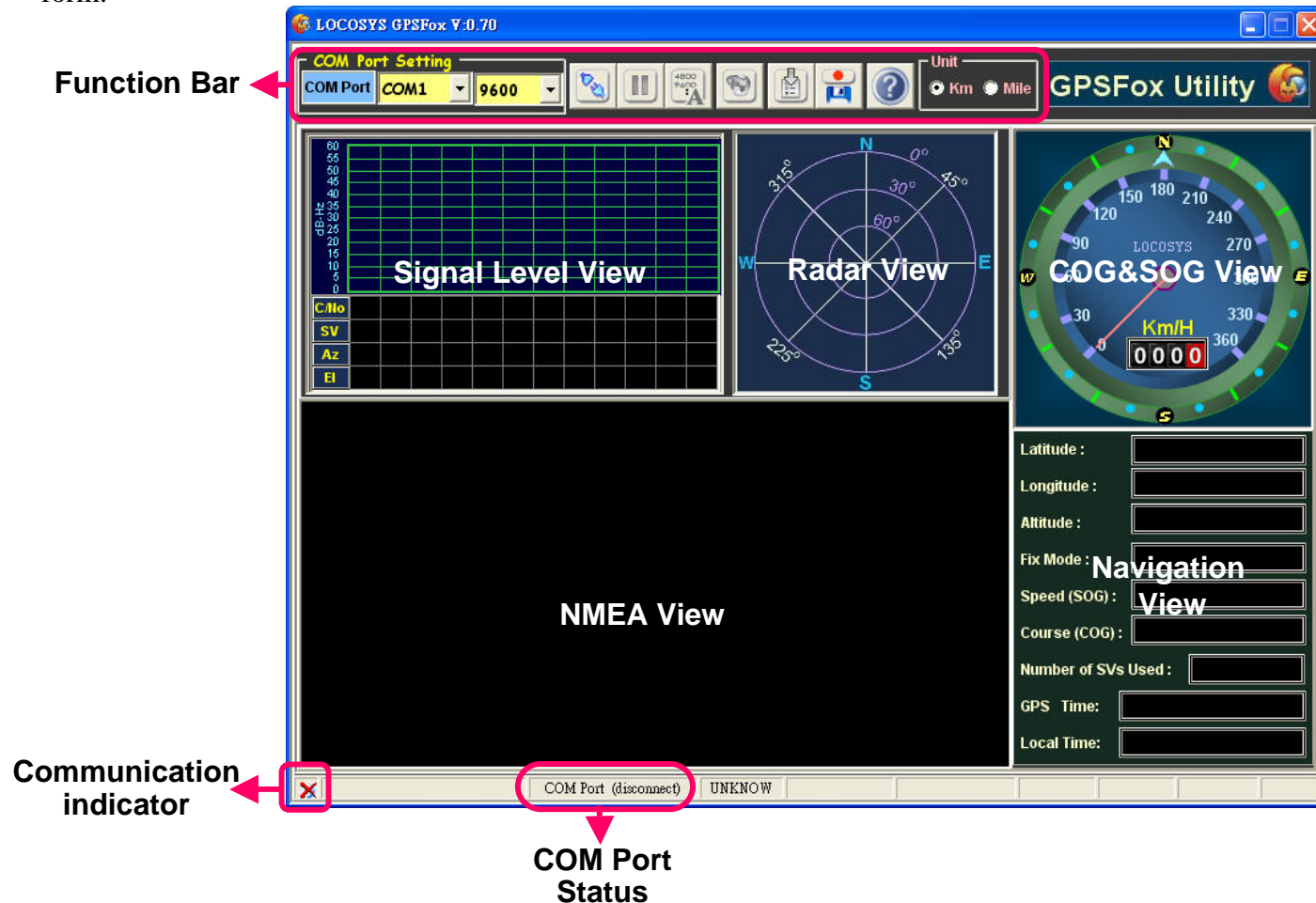
Uninstallation :

This program does not add any key to system registry. If you don't want it for whatever reason, just delete the provided files and its shortcut from your hard disk.

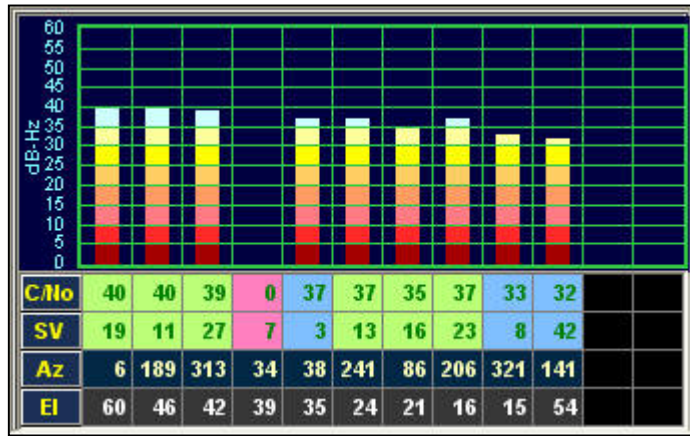
Launch GPSFox

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 "Open COM"  and then the NMEA output messages will display in the NMEA View.

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



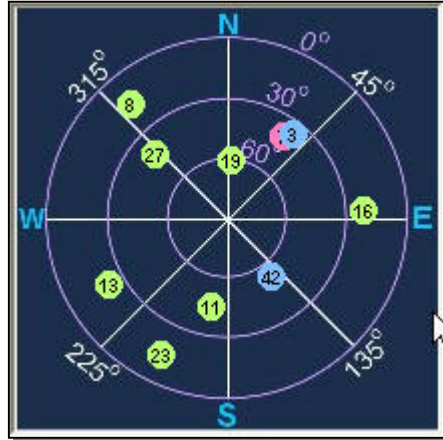
✦ Signal Level View



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/No value in both text and graphical forms.

Item	Description
C/No	Signal level in dB-Hz
Satellite Number (SV)	GPS satellite ID
Azimuth (Az)	Satellite azimuth (in degrees)
Elevation (El)	Satellite elevation (in degrees)

✦ 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:

Color	Description
Light green	Satellites being used in the position solution
Light blue	Satellites being tracked but not used
Pink	Satellites that are not tracked and are not used in the position solution

★ COG&SOG View



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



★ NMEA View

```
$GPGSV,3,1,10,19,60,006,38,11,46,189,39,27,42,313,38,07,39,034,*72
$GPGSV,3,2,10,03,35,038,35,13,24,241,35,16,21,086,33,08,16,321,31*73
$GPGSV,3,3,10,23,16,206,35,42,54,141,31*7D
$GPRMC,092048.000,A,2503.7134,N,12138.7449,E,0.06,190.60,070906,,,D*6E
$GPVTG,190.60,T,M,0.06,N,0.1,K,D*01
$GPGGA,092049.000,2503.7134,N,12138.7449,E,2,07,1.0,133.5,M,15.3,M,3.8,0000*7B
$GPGLL,2503.7134,N,12138.7449,E,092049.000,A,D*58
$GPGSA,A,3,27,19,13,16,11,23,08,,,,,2.0,1.0,1.8*39
$GPGSV,3,1,10,19,60,006,38,11,46,189,39,27,42,313,38,07,39,034,*72
$GPGSV,3,2,10,03,35,038,35,13,24,241,35,16,21,086,33,08,16,321,31*73
$GPGSV,3,3,10,23,16,206,35,42,54,141,31*7D
$GPRMC,092049.000,A,2503.7134,N,12138.7449,E,0.06,190.60,070906,,,D*6A
$GPVTG,182.99,T,M,0.06,N,0.1,K,D*04
$GPGGA,092050.000,2503.7134,N,12138.7449,E,2,07,1.0,133.6,M,15.3,M,0.8,0000*73
$GPGLL,2503.7134,N,12138.7449,E,092050.000,A,D*50
$GPGSA,A,3,27,19,13,16,11,23,08,,,,,2.0,1.0,1.8*39
$GPGSV,3,1,10,19,60,006,38,11,46,189,39,27,42,313,38,07,39,034,*72
$GPGSV,3,2,10,03,35,038,35,13,24,241,35,16,21,086,33,08,16,321,31*73
$GPGSV,3,3,10,23,16,206,35,42,54,141,32*7E
$GPRMC,092050.000,A,2503.7134,N,12138.7449,E,0.04,223.23,070906,,,D*69
$GPVTG,223.23,T,M,0.04,N,0.1,K,D*0F
```

The **NMEA View** displays the original NMEA messages and OpenTMC messages* received from GPS 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.

* If your GPS receiver with OpenTMC capability

✦ Navigation View

Latitude :	N 25.061892°
Longitude :	E 121.645753°
Altitude :	130.9 m
Fix Mode :	3D
Speed (SOG) :	0.1 Km/H
Course (COG) :	73.1°
Number of SVs Used :	7
GPS Time:	2006/09/07 09:27:38
Local Time:	2006/09/07 17:27:38

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 functions:

- COM Port Setting:** A dropdown menu showing 'COM4' and a baud rate of '9600'.
- Navigation Icons:** A series of icons for navigation functions: a compass, a pause button, a button with '4800 9600' and a refresh symbol, a globe, a button with a green arrow and a refresh symbol, a button with a red dot, and a question mark.
- Unit Selection:** Radio buttons for 'Km' (selected) and 'Mile'.
- GPSFox Utility Logo:** The application's logo on the right.

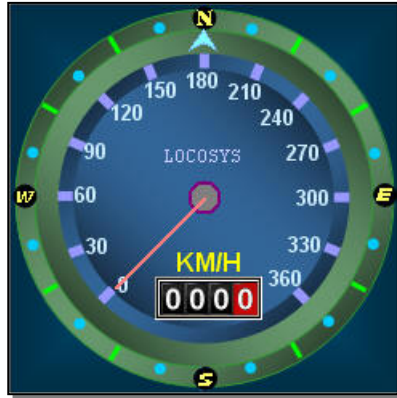
Annotations for the Function Bar:

- Select the COM port with the property baud rate which is connected to GPS receiver
- Connect/Disconnect with the GPS receiver
- Detect GPS baud rate and reconnect GPS receiver with selected COM port
- To restore all navigation parameters back to the factory defaults and perform a cold start command
- Unit selection box
- Start/Stop to log the NMEA data
- Perform a cold start command
- Pause the NMEA View

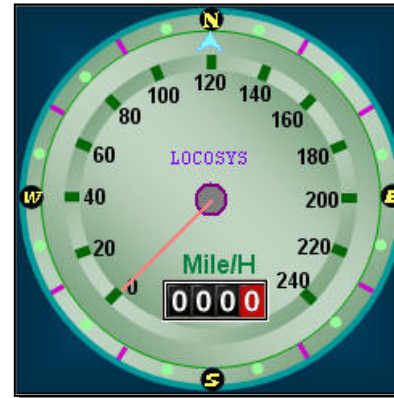
✦ Unit selection box



Display unit in metric mode



Display unit in Imperial mode



✦ Communication indicator :

Symbol	Description
	COM Port disconnection
	Data transmission ,COM port busy
	No data transmission ,COM port idle