

— Ellipse AHRS & INS

Miniature Inertial Systems

Quick Start Guide



Document
Revision

ELLIPSEQSG
Apr 10, 2018

Support

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Following instructions will help you to start quickly with your new Ellipse Device. Please read and follow it carefully before plugging the device or installing software.

Content of a development Kit

- A transport case
- This quick start guide
- A USB cable
- A USB Stick containing
 - sbgCenter analysis tool
 - sbgECom C library
 - Sample codes in C
 - Full documentation including Firmware reference manual and User manual

Depending on options, some additional items may be included, such as GPS antenna or cables.

Software Development Kit Installation

- Plug the USB Stick
- Launch the Inertial SDK executable
- Follow the instructions.
- The SDK installer will ask you for your License Key. The License key is composed of five blocks of five digits/letters. You can find it on your Ellipse DK suit case:

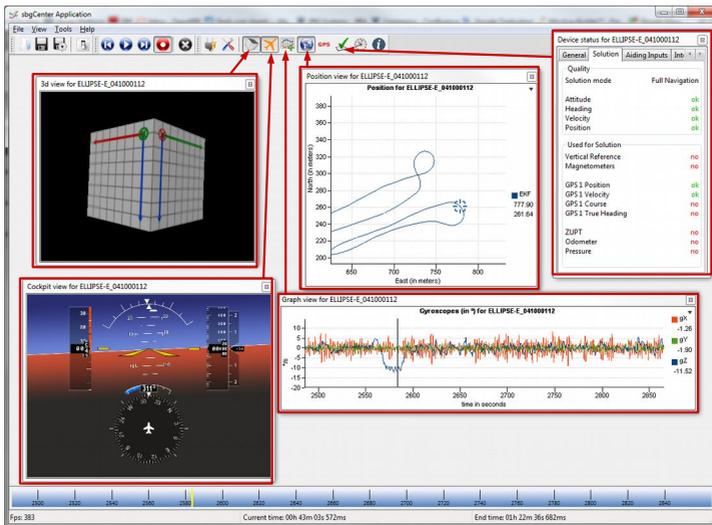


Once installed, you can **plug** the USB cable in your computer **without connecting the Ellipse** in order to configure the serial connection. Please see page 5/5 in order to configure the cable.

Getting Started with the Ellipse

Connect the Ellipse and start playing

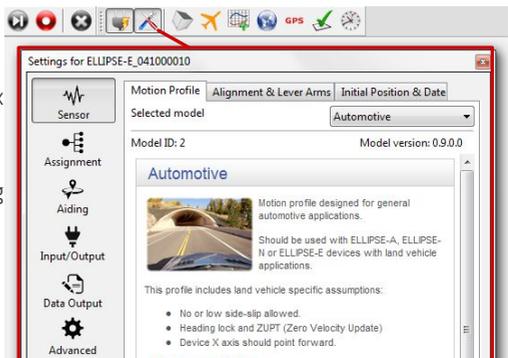
1. Click on the  icon. A window will appear to list every attached device. Click on Refresh button to update the device list, and on “connect” button to start playing with a sensor.
2. Once connected, you can open the different graphs and windows offered by the sbgCenter, as shown in the screenshot below:



Configuration

In order to configure, click on the toolbox icon  on top of the interface.

You can now navigate through each setting page by using the tabs on the left.



Communication: sbgECom library

A convenient way to interface an Ellipse with C programs is to use the sbgECom library. With simple C functions, you can retrieve the device's output very quickly. Library source code is provided with example to help you to start. **Look here:**

"C:\Program Files\SBG Systems\Inertial SDK\Ellipse\Software Development"

Interface with existing systems using NMEA and third party protocols

The Ellipse provides a wide range of input / output options. NMEA protocol as well as other third party protocols support will ensure seamless integration into your application.

Find out more

You will find the full Ellipse documentation within this Development Kit:

The Ellipse **User Manual** provides deep information about your Ellipse features and explains in details how to install and use it.

The Ellipse **Firmware Reference Manual** provides low level protocol specifications as well as advanced features information.

Several "**Operating Handbooks**" are also available to guide you in a step-by-step way into typical applications configuration.

Support

If you have any trouble or question with the use of the Ellipse, please feel free to contact our support team:

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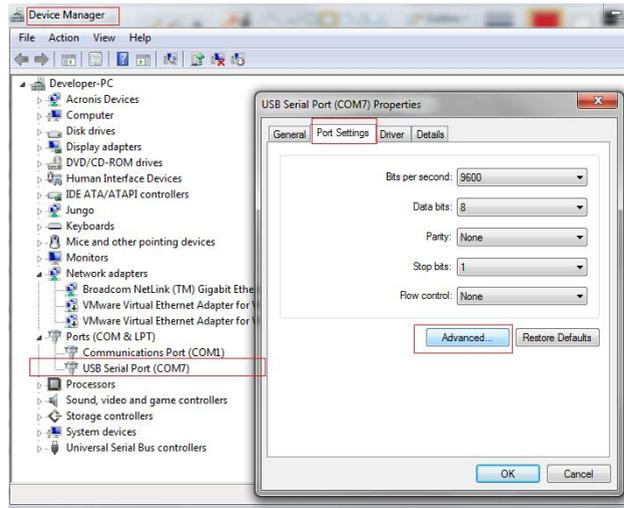
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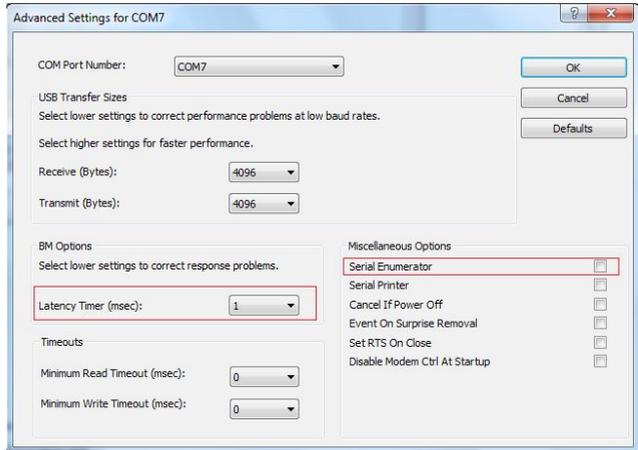
USB Cable driver configuration

After SDK installation, the following steps are required to get the system ready. Please follow them carefully.

1) Go into the Windows “Device manager”, then select your new cable com port and open “properties”. In the new window, select the “port settings” tab, then click on “advanced”.



2) In the new window that appears you should uncheck the serial enumerator and change the latency to 1.



3) Once the serial port configuration is done, you can connect your Ellipse, and start the sbgCenter.