Ellipse Series

Miniature Inertial Systems

Quick Start Guide



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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

- 1. A transport case
- 2. This quick start guide
- 3. A USB cable

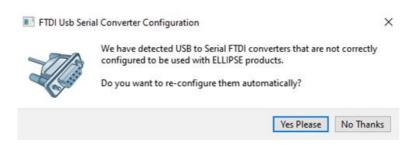
Depending on options, some additional items may be included, such as GPS antenna or cables.

Software Development Kit Installation

1. Download the latest SDK from SBG Systems support website:

https://www.sbg-systems.com/setup

- 2. Launch the Inertial SDK executable.
- 3. Follow the instructions.
- 4. Once Inertial SDK is installed, you can plug the USB cable on your computer with Ellipse connected to it.
- When you first launch sbgCenter application and try to connect to your Ellipse (see section "Connecting to Ellipse" below), a message will ask you to change FDTI USB serial converter configuration (see Figure below). Please follow instructions to ensure proper operation.

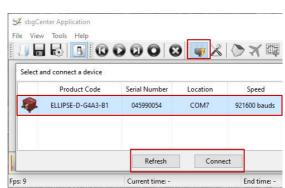




Getting Started with the Ellipse

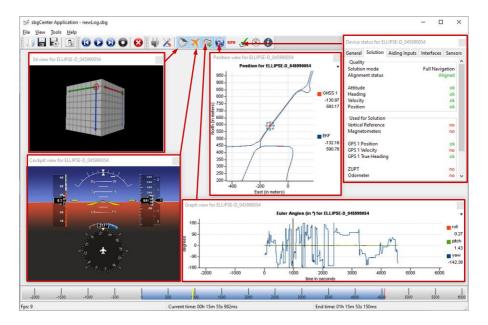
Connecting to the Ellipse

- Click on the icon. A window will appear to list every attached device.
- Click on Refresh button to update the device list, select your sensor.
- Finally press "Connect" to start working.



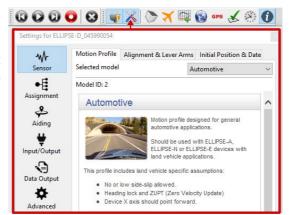
Displays

The sbgCenter provides a wide range of displays to visualize your sensor data such as 3D Cube or Cockpit view for orientation display, 2D Map, Time series graphs, GNSS data, Device status UTC Time & data, and more.



Configuration

In order to configure the Ellipse, you should click on the Toolbox icon on sbgCenter task-bar to access the different configuration sections of the Ellipse:



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 the Software Development Kit:

The Ellipse **Hardware 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.

The **Technical Reference Manual** provides in details the common concepts used in the whole SBG Systems line of Inertial Systems.

