# **Ekinox & Apogee Series** High Performance Inertial Systems

# **Quick Start Guide**



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#### Ekinox and Apogee series – Quick Start Guide

Following instructions will help you to start quickly with your new Ekinox, Ekinox 2, or Apogee Device. Please read and follow it carefully before plugging the device or installing software.

# Content of a Software Development Kit

The SDK will contains software tools and documentation for quick and easy use of an Ekinox or Apogee sensor:

- sbgCenter analysis tool
- sbgECom C library
- Sample codes in C
- Full documentation including Firmware manual, Technical Reference Manual and Hardware manuals

# Software Development Kit Installation

• Download the latest SDK from SBG Systems support website:

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

- Launch the Inertial SDK executable.
- Follow the instructions.

Once installed, the Ekinox / Apogee can be either accessed using the sbgCenter or any modern web browser thanks to Zeroconf/Bonjour Service technology.

To access the device web interface, simply type the product name and serial number in your web browser URL field as shown below:

- <u>http://ekinox\_xxxxxxx.local.</u> for EKNIOX v1 and v3
- <u>http://ekinox2\_xxxxxxx.local</u>. for EKINOX v2
- <u>http://apogee\_xxxxxxxx.local.</u> for all APOGEE

Please note the final dot (.) in the http address.

In case you did not install the SDK, make sure the **Bonjour Service** is running on your computer.

For best experience, SBG Systems recommends the following web browsers to be used:

- Chrome / Safari
- Firefox
- Edge



# Getting Started with the Ekinox / Apogee

There are several ways to make use of your new Ekinox or Apogee. The most important ones are the following:

## Configure through the Web interface

The web interface provide full access to the INS for information and configuration.



## Record and Analyze with the sbgCenter

The sbgCenter allows to record logs and to analyze graphs of the data over time. It also provides data import and export features.





#### Ekinox and Apogee series – Quick Start Guide

### Interface with third party software and systems

The INS is compatible with most popular survey software suites such as Qinsy, Hyapck, or PDS2000 using their dedicated driver.

In addition to specific driver developed, the Ekinox and Apogee series are compatible with a wide range of third party devices thanks to the support of NMEA protocol as well as other protocols (ie; TSS1, SIMRAD, ...). This enables seamless integration into existing systems using those protocols.

### Communicate with the sbgECom library

A convenient way to interface an Ekinox / Apogee 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* 

### Reconfigure network with sbgNetworkDiag

This tool is intended to reconfigure easily your Navsight network settings without affecting other parameters.

#### Step 1, connect to your system (Ethernet or Serial)

You can use either a direct Ethernet connection to your PC (Leaving the Navsight system on a network is not recommended for this step).

Alternatively, it is possible to use this tool through a UART connection on Navsight PORT A, B or C.

sogivetworkblag	
nmunication mode select Choose the communication m	t <b>tion</b> ode to use
○ Serial Port	COM1
Choose the serial port on wh The wizard will check each ba finds the device.	ich the device is connected. audrate between 4800 bps and 921600 bps until
) Ethernet	
Ethernet Make sure the device is direct A broadcast message to find and the answer listened on t	tly connected to the computer by ethernet. the device will be sent on the UDP port 52140, he nort 52140.
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#### Ekinox and Apogee series – Quick Start Guide

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When a device is detected, sbgNetworkDiag lists the main device information and its current network configuration.

🖇 sbgNetworkDiag	×
Device information	
Draduct envial	00000001
Product serial	NAVSIGHT-S-0001
Harware revision	1100
Firmware version	2.1.10322-dev
Device network information	
DHCP enabled	Automatic
Ip address	10.10.0.108
Netmask	255.255.0.0
Gateway	10.10.0.254
Primary DNS	10.10.2.10
Secondary DNS	0.0.0.0
Exit	Configure >

## Step 2, reconfigure the network or restore settings

Once connected, you have the possibility to setup Navsight Ethernet configuration or revert it to defaults. You can also revert all settings to factory defaults and simply reboot the unit.

🖸 sbgNetworkDiag 🛛 🕹	🖇 sbgNetworkDiag 🛛 🖂
Choose an action	Device network configuration
Review and change device's network configuration Review and modify the device network configuration (IP address, netmask, gateway, DNS)	Device's network configuration can be reviewed and modified here. Cloking the apply button will save the new configuration to the device and reboot it.
	Network configuration
	DHCP enabled Static 💌
	Ip address 192.168.1.2
Reboot the device and exit the wizard.	Netmask 255.255.255.0
	Gateway 192.168.1.1
	Primary DNS 0.0.0.0
	Secondary DNS 0.0.0.0
	Set to default
O Restore device to factory settings	
Restore the entire device configuration (NOT ONLY network configuration) to its default factory settings.	$\bigodot$ The proposed configuration is valid
Exit < Previous Next >	< Previous Apply >



## Find out more

You will find the full Ekinox / Apogee documentation within this Development Kit:

The Hardware Manual provides deep information about your INS features and explains in details how to install and use it.

The Operating Handbooks are a quick guides to install the unit in a specific application.

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

## Support

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

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