TopSailor

USER GUIDE
&
INSTALLATION SHEET

V1.7.0

nke MARINE ELECTRONICS

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1 PRESENTATION

TopSailor is **nke's** navigation aid software. It allows you to visualize the data flowing on the nke bus, to control and set up the autopilot, and to record logs.

2 SYSTEM REQUIREMENTS

TopSailor runs on the following operating systems:

- **Windows**
  - Windows 7 x64
  - Windows 8.1 x64
  - Windows 10 x64
  - Windows 11 x64

From TopSailor v1.5, updates will only be available on Windows 10 and Windows 11.

The software has been designed for use on a full HD (**1080p** - 1920x1080) screen. It can be used with other screen resolutions, but some pages may not be displayed correctly.

TopSailor must connect to the bus with a **nke USB Box v2.5** or later.

3 MODULES

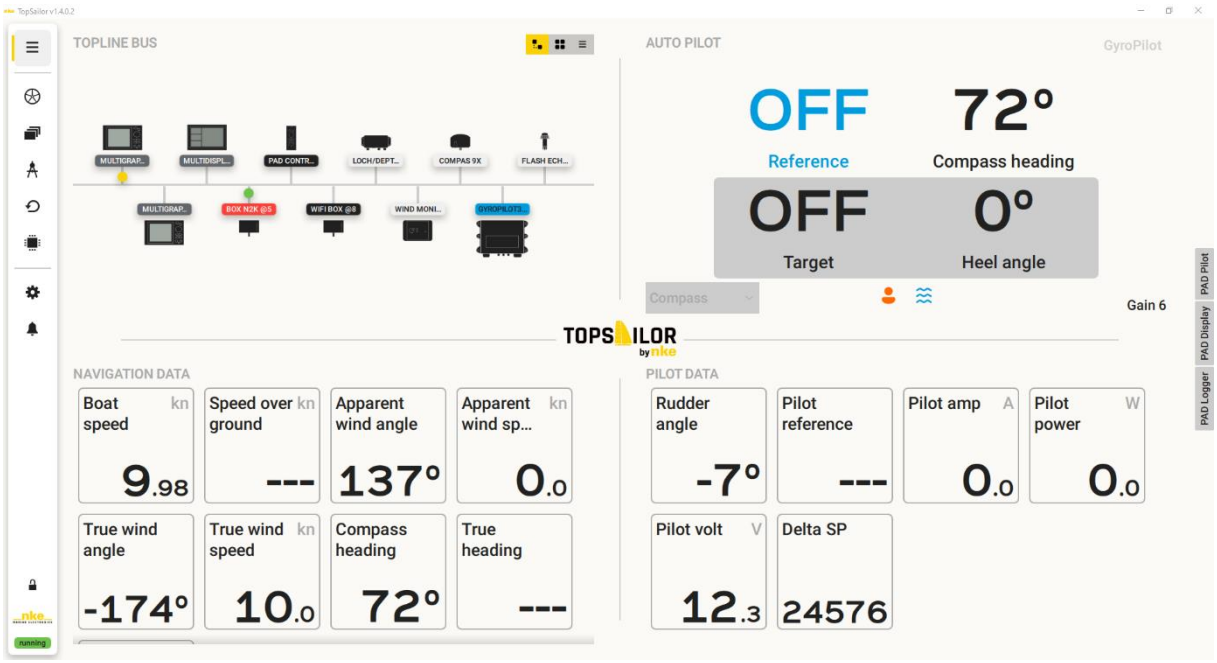
The TopSailor software offers several tabs called "Modules". Each module allows you a specific display and use.

The modules available in your TopSailor installation are displayed on the left side of the software. In the center, the page of the selected module is displayed. On the right-hand side of each module, there are PADs available for controlling the system, using shortcuts or starting a logging session at any time. You can switch between each PAD at any time.

3.1 Dashboard

The dashboard serves as the main menu for the TopSailor software. Once you have logged in to your installation, this page provides an overview of the system and navigation data.

The menu is divided into four parts:



At the top left is a model of the system including all the instruments used, with a display of names and addresses, as well as a color code (refer to §Architect). It is possible to select an instrument to open its information page.

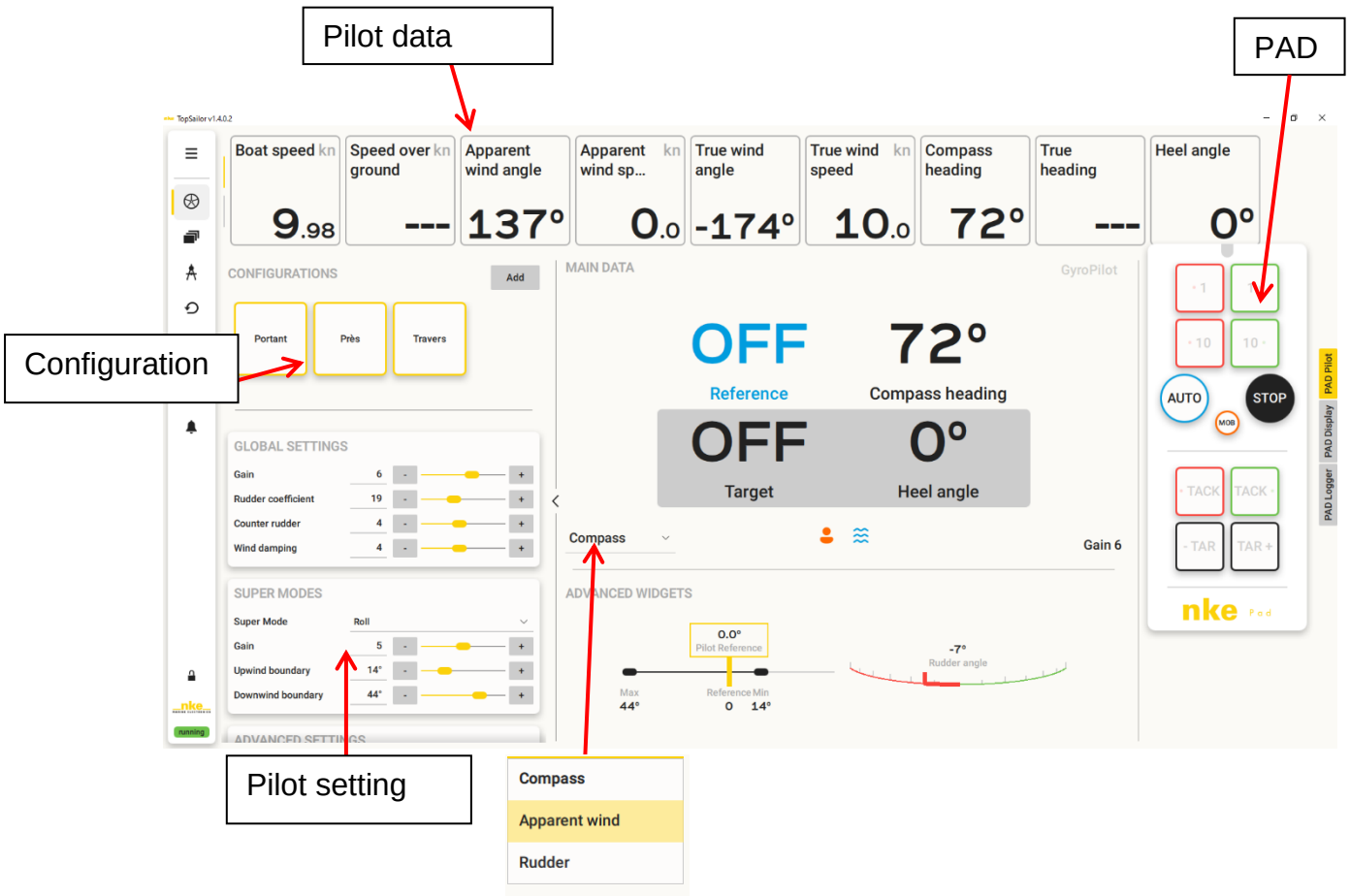
At the top right, the software displays a pilot page, indicating the ECU control mode, the setpoint and the course being steered. A widget is visible to display the rudder angle, and the two icons below indicate the type of MOB (men overboard), and the speed reference used. A click in this zone gives quick access to the pilot page.

The navigation data is displayed in the lower left-hand corner of the "Dashboard" page. The pilot computer information is available in the lower right part of the page.

3.2 Pilot

The TopSailor pilot module contains all the information about the connected pilot computer. In the upper part of the page, the pilot data is available in a scrollable banner.

The rest of the page allows you to change all the driver settings. There is the display of a pilot page, identical to what a display offers. It is possible to change the pilot mode with the small drop-down menu.

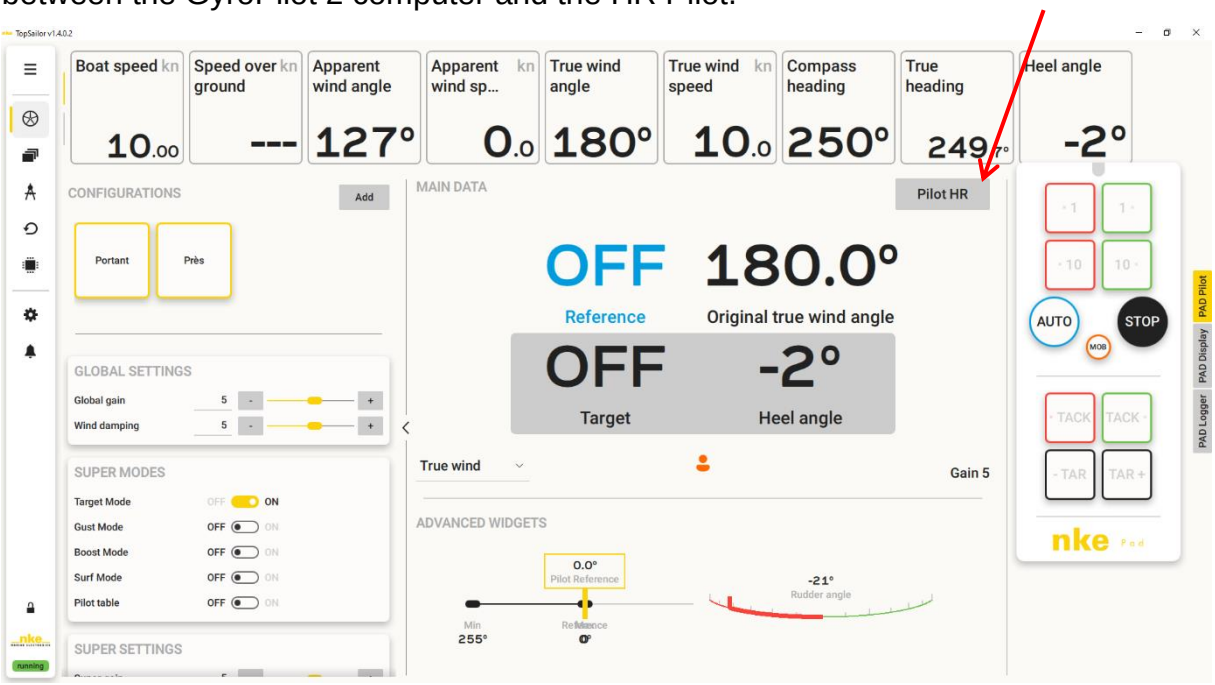


All pilot settings included in a display are available on TopSailor. Each setting that can be modified using a slider can also be modified using the input area found next to the slider. Caution, this input zone considers the raw numerical value of the parameter. For example, for a GyroPilot 2, the AUTO wind smoothing value corresponds to a raw value of 0. Once a configuration has been saved, it cannot be changed. It is possible to delete a configuration and then recreate it, or to save a new configuration.

It is possible to save each adjustment configuration by giving them a name, and to recall them at will. Once the configuration has been saved, it can be modified by clicking on the button “Edit”. It is possible to delete a configuration and then recreate it or save a new configuration. Hovering over a saved configuration brings up a summary of the settings it contains.

For more details on the driver settings, please refer to the manual of the driver used.

If a HR processor is used in the system, it is also possible to change the driver used between the GyroPilot 2 computer and the HR Pilot.



When switching to an HR pilot, the Pilot module adapts to the new features available. The pilot page displays data from the Super modes, and the pilot settings on the left are modified to add the new available parameters. The list of configurations is also changed and saves on the Gyropilot2 cannot be used on the HR pilot, and vice versa.

A pilot alarm leads to the opening of an alert window in TopSailor. This window provides the alarm code and its explanation. A sound is played and then the explanation is played until the alarm is acknowledged.

3.3 Pages

The "Page" module allows the creation of one or more pages of data. To begin with, you choose a type of page, then select each piece of data you wish to see displayed.

At the bottom right of the module is a small menu for creating, editing or scrolling through pages. It is also possible to scroll through the pages simply by holding down the mouse button and moving left or right.

« **First page**, allows you to return to the very first page.

‹ **Previous**, scrolls through the previous pages.

› **Next**, scrolls through the following pages.

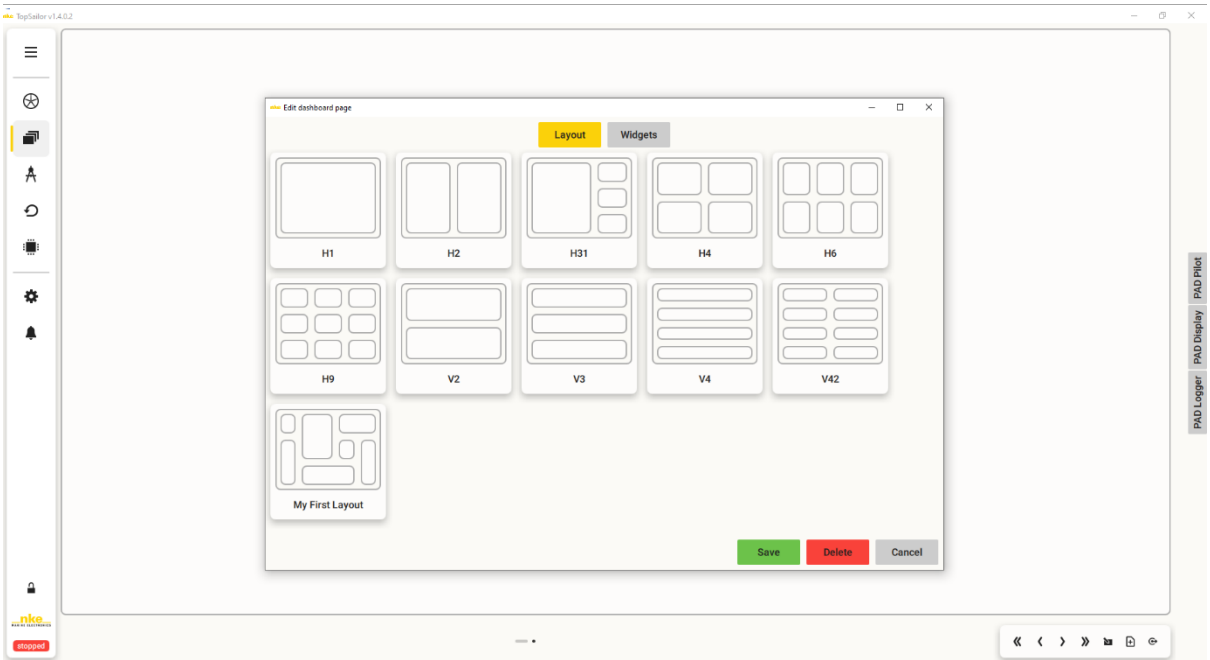
» **Last page**, allows you to go directly to the last page.

Modify, allows you to modify or delete an existing page.

Create, allows you to create a new page.

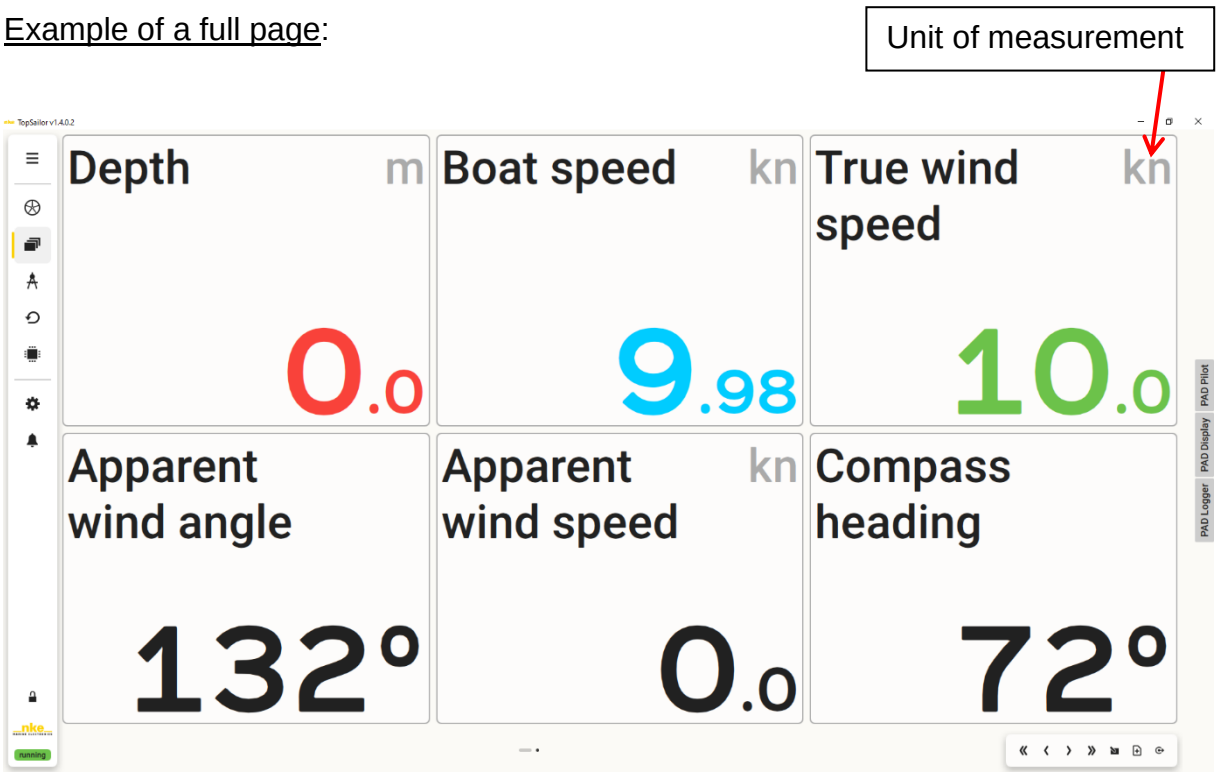
Extend, opens a new window, independent of the TopSailor software, containing the page module.

This indicator at the bottom of the page shows which page is currently open.



Once the layout has been selected from the list, the data to be displayed and its color must be chosen for each box on the page. It is possible to change the layout or the data at any time.

Example of a full page:



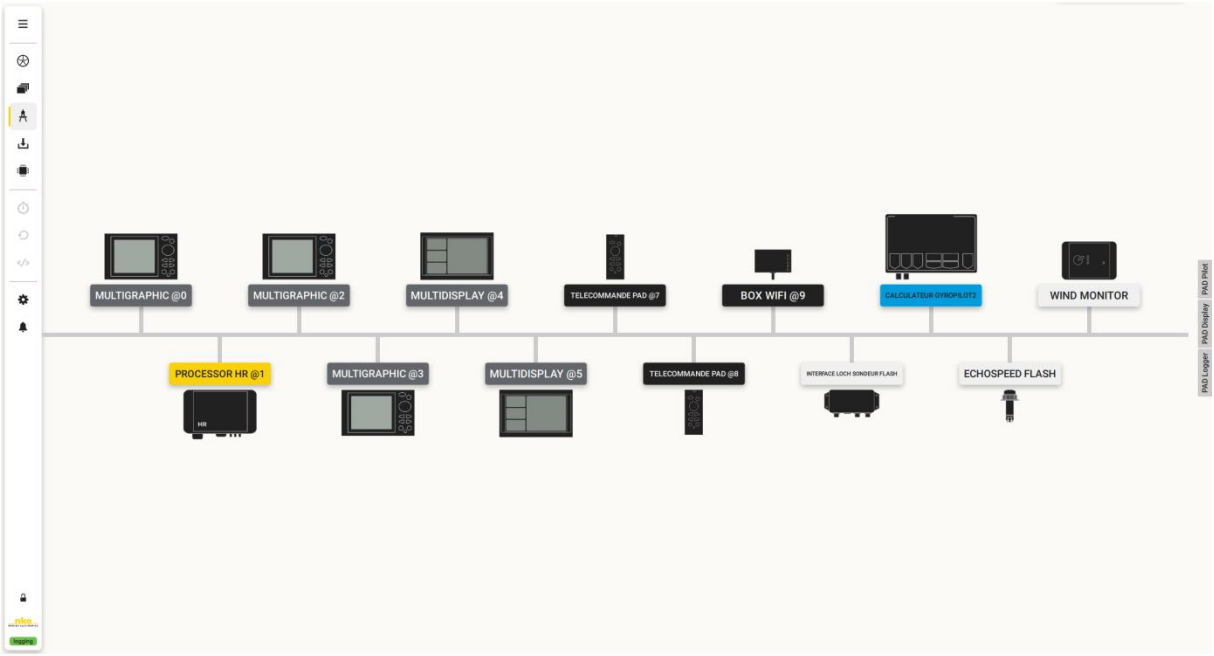
The unit of measurement can be changed in the software settings (§Settings)

3.4 Architect

The "Architect" module displays the entire installation on one page. A color code makes it possible to quickly differentiate between the various devices.

- (GREY) Displays
- (BLACK) Interfaces, PC, Radio receiver, Remote controls
- (WHITE) Sensors
- (BLUE) Calculators
- (YELLOW) Processors

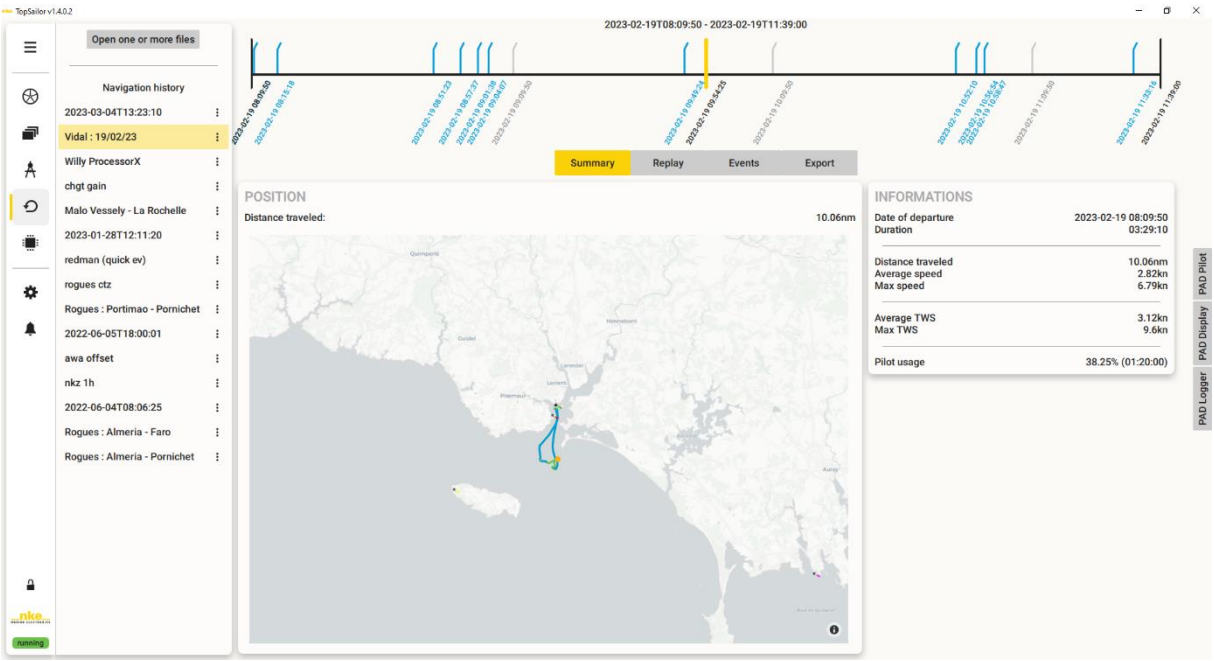
It shows the name of each product, as well as its address on the system.



Clicking on a device icon will take you to the related information page.
In the case of a non-master display (in GREY) or an interface (in BLACK), we obtain information such as the software version or the manual.
For the rest of the instruments, the data channels associated with the device are obtained.

3.5 Analyzer

The Analyzer module is used to post-process navigation.



3.5.1 Accepted log file formats

- ctz (TopSailor, Toplink)
- ctx, ctc (Processor X)
- nkz (Processor HR)

3.5.2 Open a navigation

A navigation can consist of one or more log files of the same format. To create a navigation, click on the **Open one or more files** button. A file explorer opens by pointing to the logs recording folder, by default Documents\TopSailor\logs (configurable in Settings ➔ Logger). Multiple files can be selected.

TopSailor is able to identify the different navigations within a group of selected files. A change of navigation is detected when at least one hour separates the end of a file from the beginning of the next.

Detected navigations are stored in the **Navigation history**, on the left of the page. By default, a navigation is named by its date of departure. It is possible to rename or delete each navigation from the ⋮ button to the right of its name. The navigation being analyzed is highlighted in yellow. A click on a navigation allows the quick opening of it.

3.5.3 Timeline

The Analyzer module is made up of a timeline and analysis tabs. The timeline lists the user events present in the navigation files as well as the pilot events detected by TopSailor.

Actions on the timeline:

- A click on the timeline moves the yellow cursor. It represents the position of the boat at the chosen time
- A hover over the timestamp of an event displays a hint about it
- A click on the timestamp places the yellow cursor on it
- The black markers can be moved to create a segment and analyze a portion of the navigation more in detail
- A double left click on the timeline creates a segment around the click position
- A double right click deletes the current segment and returns to full navigation

3.5.4 Summary

The Summary tab allows you to see the main navigation information at a glance.

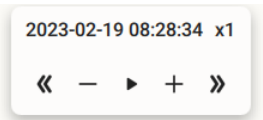
The trace on the map shows:

- in yellow the position of the boat, synchronized with the cursor of the timeline
- in blue the route with an active nke autopilot
- in green the route without nke autopilot
- in black the current segment

OpenSeaMap cartography shows lighthouses, side buoys, cardinal marks and other navigational aids depending on the zoom level. It is possible to double-click on the map to return to the initial zoom. It is also possible to click on the trace to define a segment: a first left click for the start of the segment and a second left click for the end of the segment.

3.5.5 Replay

The Replay tab lets you replay the current segment, or the entire navigation if no segment has been created.



The console allows you to start replaying, speed it up or slow it down, and go to the beginning or end of the segment.

3.5.6 Events

The Events tab lists the events that occurred during navigation. It allows them to be filtered: the filter is applied to the list and also to the timeline.

A click on an event in the list places the yellow cursor at the moment when the event occurred.

3.5.7 Export

The Export tab is used to configure and export navigation data in csv format.

The action button allows you to export data with or without events.

The action button allows you to export only the events.

The export format allows compatibility with performance analysis tools.

The csv data column headers are configurable, and it is possible to choose which data will be exported.

3.6 Processor

The Processor module works like a browser and allows you to reach the web page of the installed HR processor.

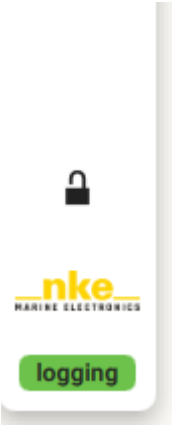
3.7 Settings

The settings give access to different tabs for adjusting the TopSailor software.

The “General” tab gives access to the main settings. It is possible to choose the language, English or French, as well as the theme of the software, light or dark.

The data has 3 display modes of its name: full name, abbreviation if there is not enough space and abbreviation. Please note that not all abbreviations are available.

Locking is done with the padlock symbol at the bottom left of the software and gives the user the ability to block access to other people or unintended actions. You can choose between two types of lock. The click allows you to unlock TopSailor with a simple click on the lock, which is useful to avoid involuntary action and to be able to unlock quickly. The password will require you to enter the chosen code to unlock TopSailor, which is useful to block access to other people.



The "Account" tab will simply display the username and give TopSailor the option to remember or not remember the user account for future logins.

The Connection page provides information on which box and which COM port the installation is connected to. It also gives the possibility to detect all connected boxes. Two parameters allow you to connect automatically:

- If only one box is detected.
- To the last box used.

The Units menu will make it possible to change the units of measurement on the display. It is thus possible to change the unit of the boat speed, wind speed, depth and temperature. The software will automatically adapt the measurement to the selected unit.

The pilot menu allows you to activate or not the validation message when the pilot is stopped.

The Logger is used for the recording settings. First it gives the possibility to start a recording automatically when TopSailor is started. It then proposes a recording

duration. This setting will tell TopSailor how long a file should be and if it is a long recording it will create several small files.

For example, for a duration of one minute, if a recording is made for one hour, the software will create a new file every minute.

The warning will, at the end of a log, display a message indicating that the storage folder exceeds the specified size. This does not prevent logging; the message appears for information purposes only.

The last part, Events, gives the possibility to create new keys, "markers" that can be used on the PAD Logger. It is possible to record events A, B, C and D of the PAD Display (physical or virtual) in the logs.

The Shortcuts tab allows you to activate or not the keyboard shortcuts useful for using TopSailor. The list of all shortcuts is available on this page.

3.8 About

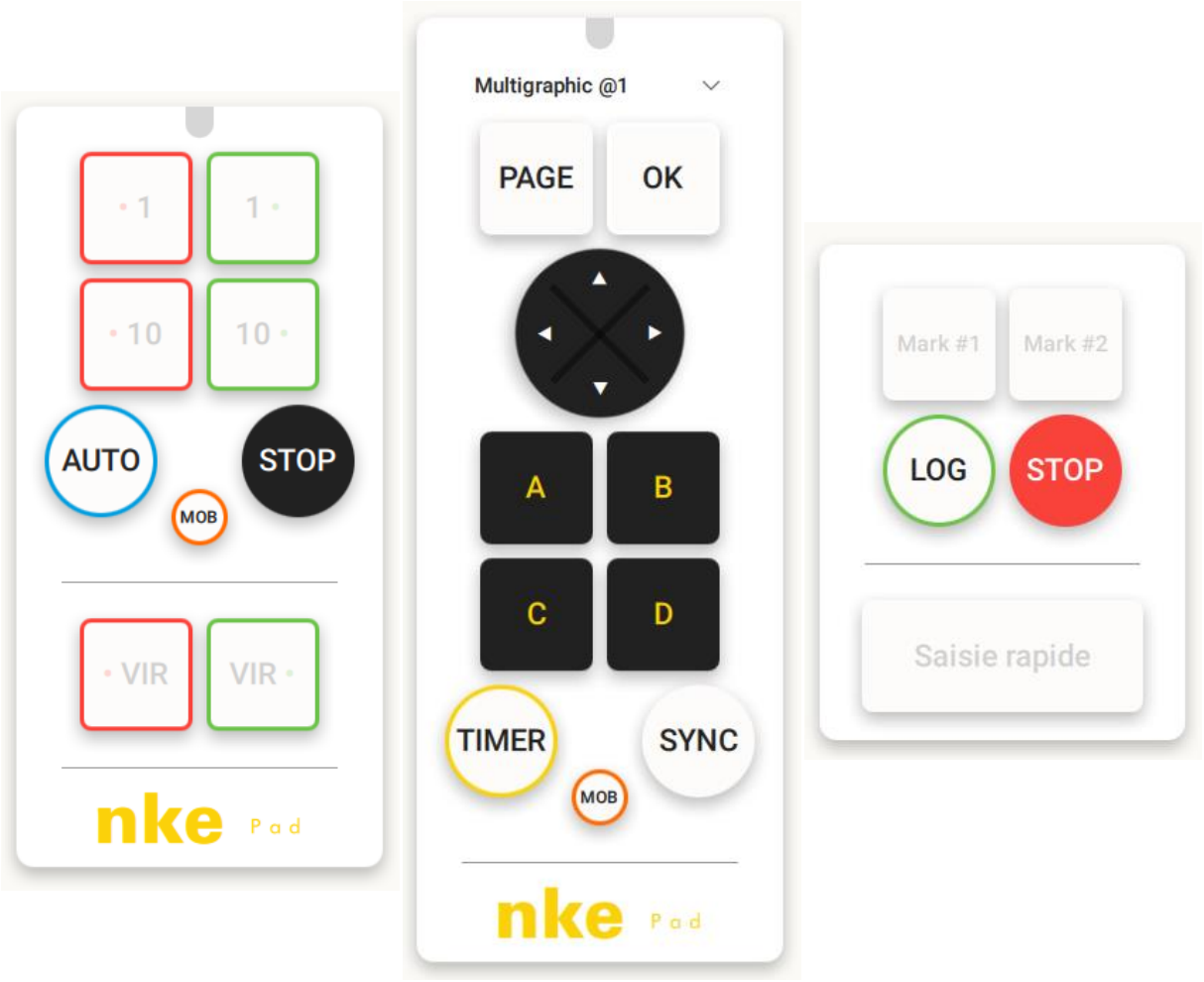
This menu allows you to consult the legal information related to the TopSailor software.

However, there is a "release notes" tab, which is only available if the module is selected when TopSailor is installed. It is possible to consult the evolution of the software on the last available updates.

The user manual can be consulted directly in this tab. It is also possible to open it in PDF format in third-party software.

3.9 PADs

TopSailor makes it possible to use nke PADs in a dematerialized way. It is possible to open them by clicking on the buttons on the right of the window.



3.9.1 PAD Pilot

The PAD Pilot is used to control the nke autopilot. It uses the design of its physical version and works in the same way: for example, a long press on the -/+ 10 keys causes a transfer.

This dematerialized version adds tack buttons to make them easier to use. *Note that you must press and hold to trigger the tack.*

It also adds target + and - buttons when a pilot and a compatible super mode are active on the bus.

3.9.2 PAD Display

The PAD Display is used to browse the displays present on the bus. It uses the design of its physical version and functions in the same way: for example, the shortcut keys allow you to display a particular setup on compatible displays (see the Multigraphic and MultiDisplay manuals).

The choice of the controlled display is made in the selection box at the top of the PAD.

3.9.3 PAD Logger

The PAD Logger does not have a physical version. It allows you to start or stop recording, or to activate events. Events are markers that can be created in the "Settings" menu (refer to §Settings for creation.) Basically, two event keys exist on the PAD Logger: MARK #1 and MARK #2. When one of the two keys is pressed during a log, the logger will note the key and the time.

The PAD Logger contains a quick entry key that allows you to send an unexpected event to the log being recorded. This event will have the code #Q (for “Quick”).

4 VERSIONS

4.1 v1.1.0

New features	
Pilot	• The GyroPilot 3 has its own page, similar to the one in the MultiDisplay v1.6, with its specific parameters as well as its own configurations. • A parameter makes it possible to choose whether the mode change causes the pilot to stop.
Fixes	
Pilot	• The saved configurations are similar to those of the displays. • The acknowledgment of a pilot alarm no longer triggers the channel 55 alarm.
General	• The automatic dimensioning of digital data has been reworked.

4.2 v1.2.0

New features	
Pages	• A summary page allows you to view all your pages at a glance.
Logger	• The quick entry button appears on the PAD Logger. It allows you to quickly send an unexpected event in the log.
Pilot	• An overview of a saved configuration allows you to see a summary of the parameters associated with it. • A pilot alarm triggers an audible alarm in TopSailor. The explanation of the alarm is read to facilitate decision making. • Pilot parameters can be entered using the keyboard for more precision. • It is now possible to access the Pilot page from the TopSailor home page, by clicking on the dedicated area at the top right.
Connection	• A parameter allows automatic connection if only one box is detected. • Another parameter allows automatic connection to the last box used.
Account	• It is possible to refresh your account from TopSailor, to recover the licenses activated while a session is in progress.

Settings	• You can choose the data name display method: data with a long name or with abbreviations can be displayed as such. Please note that not all abbreviations are available. • It is possible to check if a TopSailor update is available in the settings. • Synchronization of language and units between TopSailor and the bus is facilitated in the settings. • Crashes will no longer go unpunished! You can now automatically send crash reports to the developer to improve TopSailor's stability and performance.
Fixes	
Pilot	• The Gust widget on the GyroPilot3 page now displays a limit even when the mode is on standby.
Connection	• An automatic refresh occurs after 10 seconds if no box is detected. • During a box detection, the first result is selected by default.
Architect	• ProcessorX and GyroPilot3 now have their own image in the bus representation.
PAD Display	• A long press on the keys of the PAD works as on the instrument PAD Display.

4.3 v1.3.0

New features	
Pilot	• Import/export of configurations
Pages	• Import/export
Architect	• NMEA input detection • Pan channel detection • Alarms configuration • Slope, offset, filtering, etc..., configuration • Configuration page: a. MastHead Unit HR b. Analog Monitor c. Analog Monitor 4x d. Box N2K e. Box WiFi

	f. Compas 9X g. Fluxgate Compass h. Load Cell Interface i. ProcessorX j. Wind Monitor
Processor	• Processor X: the Processor page points directly to the actual Processor IP
General	• AIS alarm • Missing master detection • Bus disconnected detection
Connection	• Simulation mode
Fixes	
General	• Database loading speed at startup

4.4 v1.4.0

New features	
Pilot	• Added -/+ buttons to decrease or increase the value of a setting
Analyzer	• Navigation analysis (nkz, .ctz, .ctc, .ctx)
Architect	• Configuration page: Box N2K
Fixes	
General	• RAM optimization • Absent master detection optimization

4.5 v1.5.0

New features	
Logger	• Option to save PAD Display shortcuts A, B, C and D in the logs and retrieve them in the analysis events
General	• Integrated user manual • Keyboard shortcuts
Architect	• Configuration page : GyroPilot 3 • Configuration page : PAD

Fixes	
General	• Major and minor bug fixes • Optimization of alarm synthesis
Connection	• Checking the status of the PilotHR before connecting to the bus
Analyzer	• Fix parsing of autopilot modes

4.6 v1.6.0

New features	
Architect	• Configuration page: GyroPilot 3 • Configuration page: Multigraphic II • Configuration page: Multidisplay • Configuration page: 9X Compass
Fixes	
General	• Major and minor bug fixes

4.7 v1.7.0

New features	
Pilot	• New page for GyroPilot 3 and GyroPilot HR • New command API • Editable configuration
Architect	• Configuration page: MastHead Unit HR II • Change alarm status
Fixes	
General	• Major and minor bug fixes • Login with username or email • Fixed alarm triggering
Logger	• Fixed automatic creation of the folder containing the logs • Fixed the content of @0101
Pilot	• Fixed synchronization of settings between TopSailor and displays
Architect	• Configuration page: 9X Compass (R_COMPAS filtering setting)

PAD	• Long press for tacks • Timeout for sending target commands • Fixed Timer and Sync button behaviors

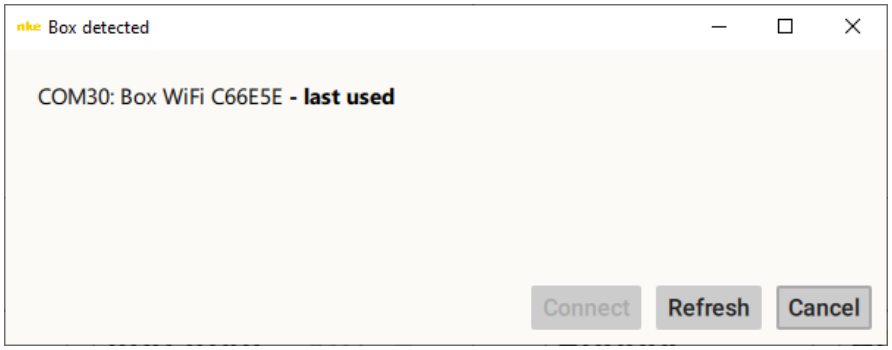
5 FAQ

5.1 TopSailor is stuck on homepage

Workarounds:

- Check your internet connection
- If you are using a proxy, check that it can communicate with the nke servers (nke-marine-electronics.fr & compte.nke-marine-electronics.fr)
- Try to restart TopSailor by connecting to another network
- Relaunch TopSailor without being connected to a network

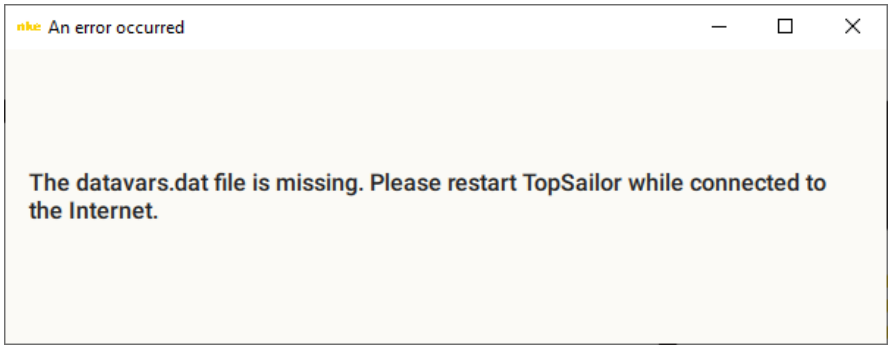
5.2 TopSailor does not connect to my nke box



Workarounds:

- Click on the name of the box then click on the Connect button
- Double-click on the name of the box

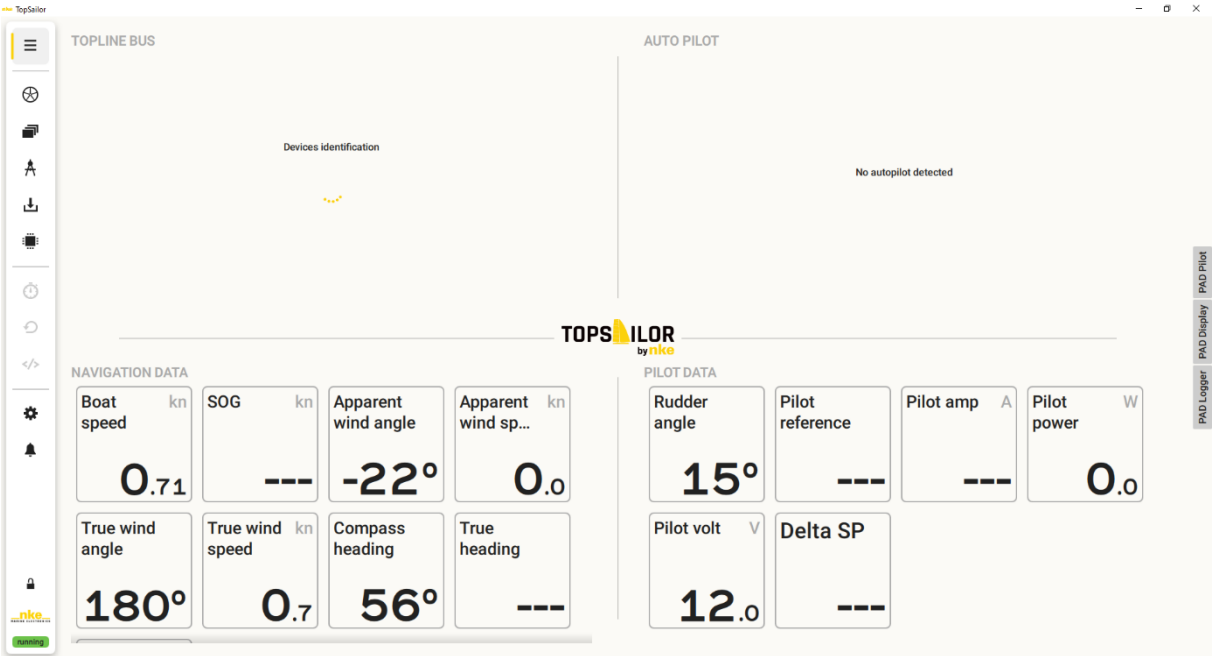
5.3 The datavars.dat error appears even when connected to the Internet



Workarounds:

- Open the registry editor and go to Computer\HKEY_CURRENT_USER\SOFTWARE\nke\Common. Change the value of the Databasepath variable to *C:\ProgramData\nke\Database*

5.4 Devices identification never ends



Workarounds:

- Go to the Settings ➔ Connection tab and click on the Disconnect button. Relaunch the detection and reconnect it to your box.