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Product presentation

Sail Knife One

The project began in 2021, as a response to the concerns of a group of sailors, to have a compact, portable system that would give them security and logging capabilities on their sail journeys.

Designed between Catalonia and Finland, and manufactured in Germany, it is a living project, not closed, that continues to evolve.

It has been designed as a system open to growth, upgradeable, a hardware base allows you to have a precision barometer/thermometer with trend and 24h graphics, a GPS positioning, a magnetic compass, a UTC clock, apart from the ship Pitch/Roll data (bow/stern and port/starboard), and G force supported on its 3 axes, all with logging on a micro SD card.

It also has an anchoring and storm alarm, and a Wi-Fi access point that allows you to display the basic data on a tablet or mobile phone.

A transparent mode has been implemented in the Gps, to send Nmea data to external applications via USB, such as OpenCpn.

Logging can be done at intervals of 1 minute (Sail mode) or 1 second (Regatta mode), and can be exported to external applications, such as a spreadsheet or exported as KML to visualize the track and associated data, for example. in Google Earth.

The system has a Usb-C port, for communication and charging the internal battery.

Sail Knife One

Data recorder for optimization and safety in marine navigation.

The system consists of:

A processor
A real-time UTC clock with battery backup.
A precision temperature sensor, sealed for aggressive environments.
A precision atmospheric pressure sensor, sealed for aggressive environments.
A micro SD card for data recording.
A multi-protocol GPS for positioning.
A USB gateway with USB-C connector.
A WIFI gateway.
A 3-axis magnetometer.
A 3-axis gyroscope.
A 3-axis accelerometer.
A touch LCD screen.

The device records navigation, positioning and GPS data on the micro SD card at intervals selected by the user. every minute in Sail mode : or every second in Regatta mode, and you can show them on the screen or via Wifi on an external device.

The data captured in the micro SD are:

GPS positioning: Latitude, Longitude, Speed, Heading, Gps date and time, System UTC Time, COG, Mag Bearing (Magnetic Compass), Pitch, Roll, Supported G Force and Tack speed in degrees per second.

The SD card will save said information at selected intervals (Sail Mode -> 1 Min or Regatta Mode -> 1 Sec), which can later be exported to analysis or positioning programs.

The data shown on the screen are:

UTC time and system date.
Ambient temperature with 24h log.
Atmospheric pressure with 24h log, barometric trend at 1h, 3h, 6h, 12h, 24h. and storm alarm (fall > 4 mb/3h).
Pitch/Roll of the boat (Bow – Stern ->Pitch/ Port-Starboard ->Roll).
Course over ground (COG), GPS and compensated magnètic compass
GPS positioning data (Lat, Long...).
Boat speed in knt.
G force supported by the boat (+/- 2G), in its 3 axes
Tack speed in degrees x second.

Additionally, the basic data (UTC time, GPS position, speed, COG, Pitch and Roll) can be displayed via a Wi-Fi Access Point on any external device using a web browser.

Added features:

-Anchor alarm, allows you to receive an alert if we move from a previously selected point.

-Barometric alarm due to sudden drop in atmospheric pressure (>4 mb/3h).

-Transparent GPS mode that allows Nmea GPS data to be forwarded to an external device via USB, to be analyzed with applications such as OpenCPN..

-Control LBS (Low Batt. Shutdown), which monitors the battery and proceeds to the safe shutdown of the system if there is a critical discharge of the battery.

Description

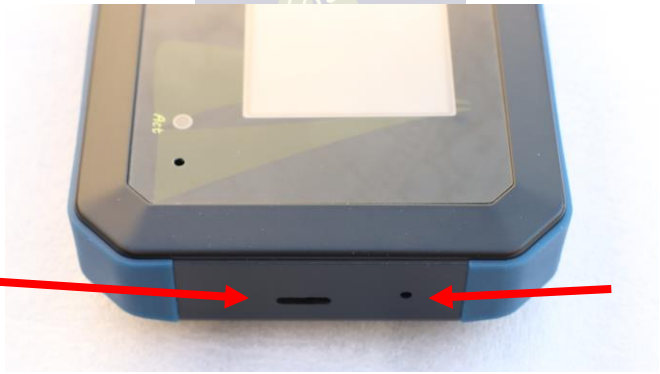
Power button

Power Led

Charge Led

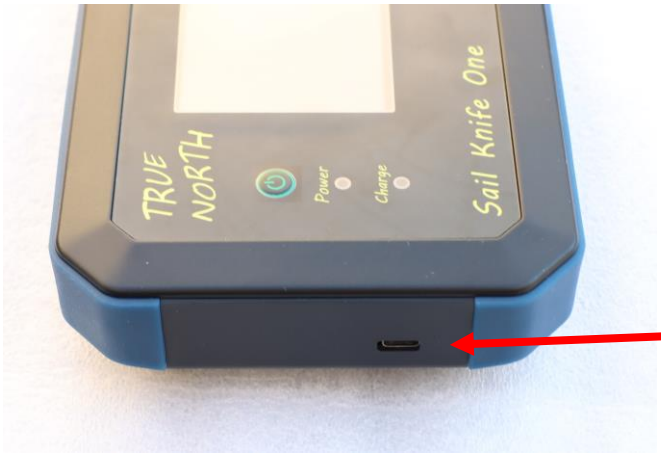
Activity Led

Barometric Sensor



Micro SD slot

Reset Button



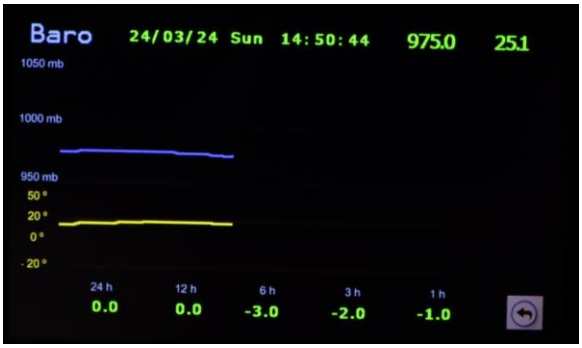
USB-C port

Main menu

Here we will find the 4 icons that allow us to access each menu option, apart from which you can access them in sequence, simply by sliding the current screen to the left. or the right *.

* For security reasons, sliding access to the configuration menus is not allowed.

1-Baro Screen



-Barometric graphic from 950 to 1050 mbar
-Graphic temperature from -20º to +50º, UTC date and time (System),
-Atmospheric pressure and temperature values
- Barometric trend data at 1h, 3h, 6h, 12h and 24h
- Automatic Auto Zoom of the graphics (*), every 10 seconds, offering an enlarged view of them for 10 seconds (as long as we have more than 24 hours of accumulated barometric data).
-The barometric data (*) are saved on the SD card automatically every 24 hours (last 96 barometric samples), when the system is turned off or by LBS (Low Batt Shutdown) (*) if the battery reaches a critical discharge level.
-Storm alarm if there is a fall > 4 mb / 3h.

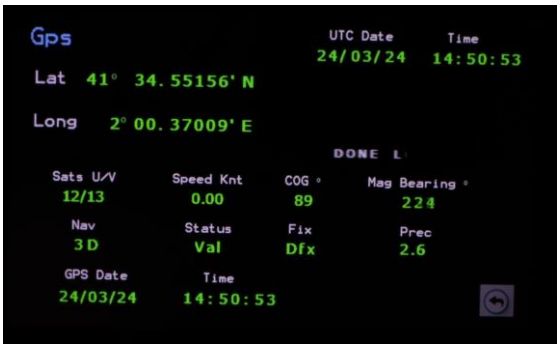
(*) Autozoom enlarges the graph to show the evolution details, but the lateral scale will not be related to said enlargement, the scale is only valid for normal visualization.

(*) The data is captured every 15' by default, but the log can show captures with a longer period of time depending on the system load.

The temperature is updated every 10 seconds on the screen. The last barometric data captured will always be in the right part of the Baro screen (last time captured).

(*) Low Batt Shutdown, if necessary, will close the processes and files and creates a file with the basic data of UTC date/time and GPS, location, Cog, Spd and battery voltage, from the point where it has produced the shutdown, proceeding next to turn off the Sail Knife One.

2-Gps Screen

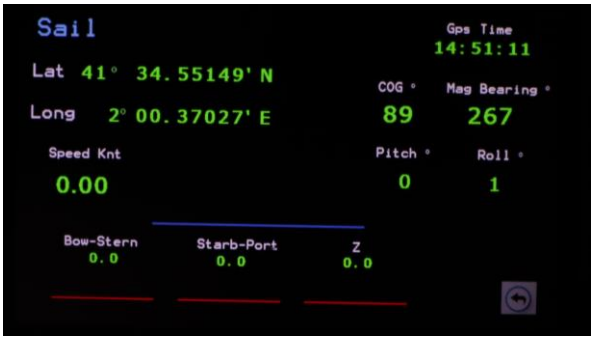


- UTC Date and Time (System)
-Latitude and Longitude (*), Degrees – Minutes – Seconds format, also selectable in Degrees-Minutes and Minute tenth format.
-GPS satellites used/visible
-GPS speed in Knt
-Course over ground
-Mag bearing (system compass, magnetic)
-Gps signal quality indicators: Nav / Status / Fix Horizontal precision in meters.
-Gps date and time.

(*) The displayed coordinates will always be the last ones received along with the GPS time and date of that Fix, which by comparing it with the current UTC time, will allow us to know if the displayed position corresponds to the current time.

If the Lat and Long indicators are not updated due to poor GPS signal reception, verifying the GPS time will tell us what time we received the last valid position. , if no GPS data is received, the time will change to Red (on Gps and Sail screens), if the reception is correct, the time will be shown in green.

3-Sail Screen



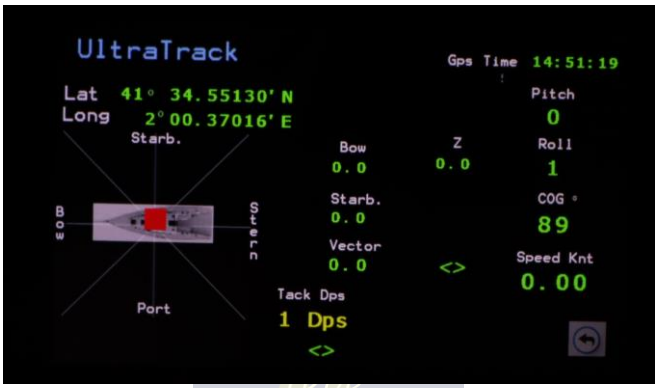
-GPS time
-Latitude and Longitude, DD – MM – SS format, also selectable in DD-MM.mt format
-GPS speed in Knt, with evolution graph.
-Course over ground
-Mag Bearing (*), magnetic compass of the system. -Pitch and Roll (inclination fore-aft, starboard-port) -G force supported in the 3 axes (+/- 2G), with evolution graph.

(*) Mag Bearing does not vary depending on the location (Placement) of the system, it will always point Magnetic North with respect to mark 1 (see location/Placement).

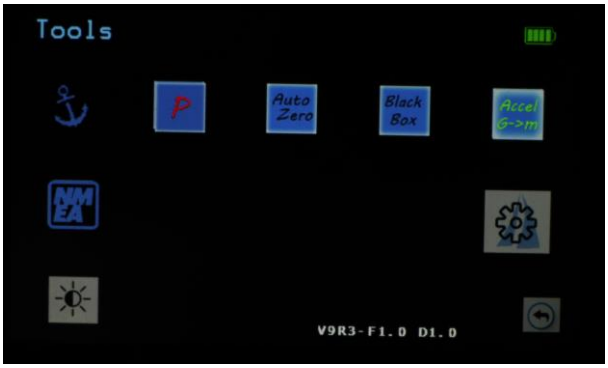
From this screen, sliding will show the UltraTrack screen.
This screen shows the position of GPS, Pitch, Roll, Cog, Speed, and the G force/Accel values in the Bow-Stern, Port-Starboard axes visually as an inertial red box (computed vector modulus , the Z axe is shown as a vertical bar , as well as the DPS indicator (speed of turn in degrees x sec.).

This makes it easier to see the acceleration during maneuvers, and the combined force vector.
The units will be G or mts x sec, depending on whether the G->m button has been selected in the Tools menu.

Ultratrack Screen

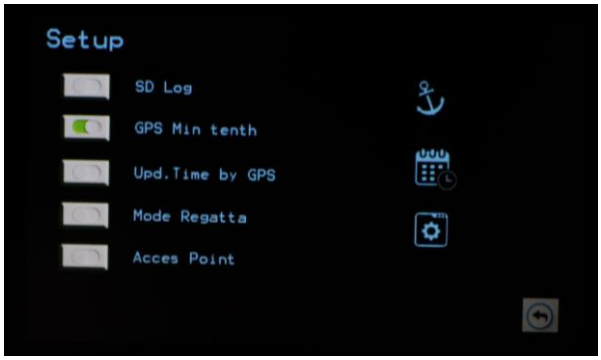


4-Tools Screen



- **Battery** charge status icon.
- **Anchor Mode** activation icon
- **NMEA mode** activation icon
- Icon for accessing the screen **brightness** adjustment menu.
- Icon for accessing the **System Placement** menu (location of the on-board system)
- Access icon to the **system settings** menu.

Tools –> Setup menu (System configuration)



Sd Log button: Activation/deactivation of the micro SD log
Gps min tenth button -> Activation of Lat/Long format in tenths of a minute or Degrees, Minutes, Seconds.
Button **Upd time by Gps**->Actualización de Time/date system from that of the Gps. Regatta Mode button->Activation of **Regatta Mode**.
Access Point button->Activation of the Access point
Anchor set icon ->Access to Anchor distance configuration menu.
Icon **Date/Time Set**->Access to system UTC date/time configuration.
Calibration icon->Access to calibration of the inertial and magnetic systems.

Starting the system

When you press the power button, the system starts and the main screen appears, the led stays in blue, during that time the system is configured internally, internal checks are carried out to start the system processes safely.

After a few seconds, the LED starts to flash in blue, approximately once every second, indicating operational status.

When starting the system or during operation, informative banners may appear in the the screen.

When the Activity LED starts flashing, the system is already operational.

Power off

Pressing power, the "Power OFF Requested" banner will appear on the screen, you must keep power pressed (about 3 seconds) until the Activity led turns red, at that moment stop pressing Power and the system will turn off safely, closing active processes and saving the Baro Log and/or Navigation information on the SD card (if SD Log was active),

This 3 seconds delay in the shutdown is implemented for security, to avoid accidental system shutdowns.

The Activity LED indicates:

Flashing blue (after starting the system): System operating safely.
Blinking Green: receiving GPS data.
In Red: Recording data on the micro SD or performing a calibration sequence.

In **solid blue** (when starting the system or during operation):

-IF Starting the System :

1-System Locked

2-System waiting
3-Internal anomaly.

If this occurs (1,2,3), turn off the system and start it again, observe the informative banners to see if they provide information, in case of a permanent failure contact technical support.

The system starts by default in Sail mode:

- Baro data captured every 15'.
- Temperature data every 10".
- Inertial systems (pitch, roll, G Force) and magnetic (Mag Bearing) every 0.5".
- Screen update every 0.5".
- Update of the access point every 10".
- NOT active by default: Access point, Nmea Mode, SD Log...

If the user activates Regatta mode (Tools->Setup)

- Baro data captured every 15'.
- Temperature data every 10".
- Inertial systems (pitch, roll, G Force) and magnetic (Mag Bearing) every 0.2".
- Screen update every 0.2".
- Update of the access point every 1" (*).

- NOT active by default: Access point, Nmea Mode, SD Log.... Access point, Nmea Mode, SD log, Gps Min Tenth, Update Time or Anchor can be activated independently in both modes.

*The Access Point is updated depending on the destination device and browser, the update frequency can be 2-3 seconds although the Sail Knife One sends data every second.

Description of the configuration options:

Tools menu

Set Anchor

By selecting this icon, the Anchor mode is activated, the anchor distance selected by the user is retrieved, the current position is verified, and if the GPS signal is good (Fix OK), the monitoring of the current position is activated every 10 seconds, emitting an alarm in case of position outside the margins of the selected Anchor distance or due to loss of the GPS Fix.

If the distance limits are exceeded during the control performed (every 10 seconds), the system will emit the alarm.

The accuracy selected for the Anchor is evaluated with 99.7% accuracy, so every 10 seconds the system verifies that the GPS Fix is valid as well as the positioning (Navmode) is 3D, if this is not met the system will emit the Alarm , although we are not outside the limits of the selected Anchor.

We want to remind you that ANCHOR is only a complementary tool that MUST NEVER replace the experience and vigilance of a good Sailor.

This mode is compatible with SD Log and Access Point.

If Nmea or Regatta Mode are active when activating Anchor, Nmea and/or Regatta Mode will be disabled.

Nmea Mode

The GPS data is sent by USB to an external device, for analysis, or to applications such as OpenCPN.
When activating this mode, if the current mode is Regatta, it starts working in Sail mode, giving priority to the received GPS information and sending it to the external device.
The GPS data on the device's GPS screen will be frozen, with the exception of the UTC time and date.
The data on the Sail screen will continue to be updated, with the exception of Lat, Long, Speed and COG.
When selecting the "Nmea" icon, it will change to red, indicating that it is active, the following press on the icon will deactivate said function.
Once selected the system will return to the main screen and the system will send the data to the Usb port.
This mode is NOT compatible with the modes: SD LOG (GPS information will NOT be saved), Sail Mode, Access Point (GPS information will NOT be updated),

Anchor

If Anchor is active when activating Nmea, Anchor will be disabled.
If the Regatta mode is activated, while Nmea is active, it will be deactivated.

Bright In this option we select the brightness of the screen. It is recommended not to select an excessive brightness or leave the same screen fixed for a long time, since burnpoints or shadows may appear.

Location (Placement) This option configures the location of the system on the boat, it is important to correctly inform in this menu the location selected for the system. Sail Knife One can work horizontally or vertically, as well as located on the bow, stern, port or starboard, these are eight possible locations.

The numbers in the illustration above show a guide to orient the system and select a correct Placement.

For example, if we select the Placement 1 option, the system would be located on a bulkhead or wall (Vertical Placement) or on a table (Horizontal Placement) , and located on the port side, since the system would have: (1) facing to port, (2) facing stern and (3) facing Bow.

Option 1: 1 Port, 2 Stern, 3 Bow
Option 2: 1 Starboard, 2 Bow, 3 Stern
Option 3: 1 Bow, 2 Port, 3 Starboard
Option 4: 1 Stern, 2 Starboard, 3 Port

All the Sail Knife One systems are configured internally for the selected Placement, with the exception of the magnetic compass, which for security will always have its central point of reference (North) at 1.

If the system has been configured with the correct Placement:

-The Roll values shown will be positive towards Starboard and negative towards Port.
- The Pitch values shown will be positive when the Bow is rising and negative when the Bow is sinking.
-The values of Force G, axis X Bow(Bow)-Stern(Stern), will be positive towards Bow and negative towards Stern.
-The values of Force G, axis Y Starboard(Starboard)-Stern(Port), will be positive towards Starboard and negative towards Port.
-The values of Force G, axis Z Swell, will be positive upwards and negative downwards.
-The values of DPS (turning speed) will be positive towards Starboard and negative towards Port.
The system must be located away from magnetic, electric fields and solid metal areas, otherwise the values shown may not correspond to reality.

AutoZero

This option configures the Sail screen, so that the G force values and graphs and the Pitch and Roll values show 0 at rest.
It is important to activate this option in rest, not in navigation, since AutoZero uses those static values as initial values to calculate the reference 0.
For example, if in port before departure, we have a heel of 1º, when you activate AutoZero the value that will be displayed will be 0º.
This will only affect the display of said values on the Sail screen, all the values captured in the Log will always be the real ones received by the systems and sensors, without any type of correction.
This option is not saved in memory, it must be activated each time the system is started, since the calculated values can vary in each output

Black Box Mode

To improve the capture of data, especially in Regatta mode, by activating this option we cancel the presentation on the screen of the *Mag bearing, Pitch, Roll, G force and Tack DPS data, so*

that they will not be updated on the screen, but they will be captured on the micro SD, with a considerable improvement in the accuracy of capture, since the processes of continuous presentation on the screen suppose a considerable load of the process. The relevant navigation data such as Gps, Cog, Speed will continue to be updated normally.
This option is not saved in memory, it must be activated each time the system is started.

Accel G->m

By activating this option, the acceleration data will no longer be displayed in G force units and will be displayed in meters x second. This will also affect the log saved on the micro SD.

This option is not saved in memory, it must be activated each time the system is started.

Batt Icon

At the upper right corner is the battery icon, which will tell us:

1) if we are charging,
2) the battery level with 4 levels, or
3) if it is discharged.

Pressing the battery icon will display an informational banner about the battery status on the screen, as long as there is no other banner showing at the time.

Two different methods of analyzing the state of the battery are used, the banner shows the battery voltage and an ERT (estimated runtime) that gives us information on the expected (ESTIMATED) duration of the battery based on the voltage, load, and the current consumption of the system.

The estimated ERT will only be valid if a full charge of the battery has previously been completed (battery indicator with the 4 segments visible in green and the red charge led off), being valid until the completion of a new full charge cycle.
If a partial battery charge is carried out, the ERT will not be valid.

SETUP Menu

SD Log

As long as a formatted micro SD card is inserted (Fat 32), the recording of navigation data will be activated, with the interval defined by the mode (Sail or Regatta) (*2).

The data are saved in CSV format, as text, and exportable (*1). If there is no SD card inserted, the SD Log mode will be automatically disabled.

The SD card must always be inserted or removed with the system turned off, otherwise we can cause data loss or damage to the system.

(* 2) Small interruptions or displacements of information may appear in the saved log.
(*1) The data can be recorded at intervals that do not exactly correspond to that of the selected mode (Sail/Regatta), depending on the process load on the system.

The file on the SD card will have the number DDMMAA-S.TXT, where DD corresponds to the day of the month, MM to the month and AA to the year, and S to Sail. The data are separated by commas (CSV), to be easily imported into a spreadsheet.

Data in the SD (DD,MM,SS mode)

H , MM , S , PRESS , TEMP , GPS Date , Time , Geo Format , G , M , S , N/S , G , M , S , E/W , Spd , COG , Pos mode , G X , G Y , G Z , Magic , Pitch , Roll

Data in the SD (DD,MM.DM mode)

H , MM , S , PRESS , TEMP , GPS Date , Time , Geo Format , G , DM , N/S , G , DM , E/W , Spd , COG , Pos Mode , G X , G Y , G Z , Mag , Pitch , Roll

If SD Log is activated and there is a change from one day to the next, the system will close the previous day's file and create a new one with the new date.

Gps Min Tenth **(*), Activate the Latitude and Longitude display option in degrees, minutes and tenths of a minute. By default, the system displays said data in degrees, minutes and seconds.**

* The selected option is permanently saved in memory.

Update Time by Gps**, when activated, the UTC date and time of the system will be updated based on the valid data received from GPS, with the exception of the day of the week and as long as we have a valid Fixed.**

Regatta Mode

Activation of regatta mode, the capture of information goes from Sail mode (every minute) to once per second, this affects the speed of data presentation on the screen, the Log in the SD card and the Access Point.

If when activating Regatta mode the Nmea or Anchor modes are active, Regatta mode will not be activated.

* The selected option is permanently saved in memory.

Access Point

By activating this option, the basic data is sent to an external browser, the information is updated every 10" in Sail mode or every second in Regatta mode (*).

Name : True North – Access-Point
Web/IP address: http://192.168.4.1
Pwd : 123456789

(*) The update frequency also depends on the browser and the system that receives the information.

Anchor distance

Here we configure the security distance of the Anchor, once selected (from 10 to 250 mts) when pressing Set, this will be saved permanently.

Date/Time

Configuration of the system date and time (UTC), when pressing Set, the information is permanently saved in the system's internal clock, as it has an internal backup battery.

Calibration

The system has inertial and magnetic devices that must be calibrated to maintain their accuracy, this affects the Mag Bearing, Pitch, Roll, G force (acceleration) and DPS (Tack Speed) data.

If you believe that these data may not be correct, you should proceed to calibrate the system.

In the Tools -> Setup menu, the Calibration icon appears, when selected it will change to red and the process will start.

This process is automatic and consists of 2 different parts or processes:

1-Calibration of Gyroscope and Accelerometer.

2.-Calibration of the magnetometer.

During each calibration process, the led will light up in red intermittently, and informative banners will appear about the process. It is important that there are no metal elements, magnetic or electric fields nearby.

When activating the calibration, first process 1 is executed (duration 6 seconds), the system must previously be positioned horizontally on a surface without any movement and correctly leveled, at the end of this process the red LED will turn off.

Immediately 6 seconds later, the 2nd calibration process will begin (duration 30 seconds), the red LED will light up again, during the process**, the system must be rotated completely on its 3 axes**.

Carrying out this calibration correctly guarantees the accuracy of the system.

The calibration information is permanently saved in non-volatile internal memory.

Notes:

The system comes calibrated , but it is convenient for the user to verify that the indications are correct and if necessary carry out the calibration.

It is important to select the correct location of the system (Placement), since all systems adjust to that selection, with the exception of the magnetic compass.

The magnetic compass **will always mark the North from the point marked as (1),** it will not be affected by the location of the system (Placement) and is compensated in inclination up to a maximum of 40º.

This has been implemented in this way for 2 reasons:

-Guarantee that the magnetic north is always well situated and does not depend on the selection of a possible wrong placement.

-Guarantee the portable use of the system, with the assurance that (1) the indication reference will always be in magnetic North, regardless of the Placement selected, in case, for example, of a rapid abandonment of the Sail.

The maximum accuracy guaranteed by the GPS manufacturer and verified in our tests is about 3 meters, under favorable reception conditions.

The internal antenna is sufficient for normal use of the system, but if you want greater precision, faster data capture, or Anchor (Anchor distances) with small radios (10,15,20 meters) you should select an external antenna.

The charging of the internal batteries is carried out by the USB-C port , fully automated and monitored for security, this port also allows the connection to a computer to receive Nmea data from the internal GPS.

It is convenient not to use the Access Point permanently, or a high brightness of the screen, as they significantly increase battery consumption, reducing the operating run time.

Technical specifications

Barometer

Absolute range : 260 hPa to 1260 hPa

Used range : 950 hPa to 1050 hPa.

Precision : 0.5 hPa

Temp compensated.

Enclosed in protective gel.

Thermometer

Absolute range : -40 to +85°C

Used range : -20 to +50º.

Precision : ±1.5 °C

Enclosed in protective gel.

UTC Clock

Internal oscillator precision ±2 ppm from 0°C to +40°C , ±3.5 ppm from -40°C to +85°C (error ±0.3024 sec/day).

Internal backup battery.

GPS

GNSS multi protocol , three system concurrent reception (GPS, Galileo, GLONASS y BeiDou).

Bands : GPS L1C/A, SBAS L1C/A, QZSS L1C/A, QZSS L1 SAIF, GLONASS L1OF, BeiDou B1I, Galileo E1B/C

72 simultaneous channel reception.

Sensibility -167 dBm.

Temperature compensated internal oscillator.

Horizontal Precision : GPS & GLONASS 2.5 m , GPS 2.5 m , GLONASS 4 m , BeiDou 3 m , Galileo 3 m.

System Battery LiPo

Lithium polymer , 3.7V rechargeable , 4000 mA/h

Approx runtime :

LCD 20% and Regata mode active : 13h
LCD 50% and Regata mode active: 11h

LCD 100% and Regata mode active : 7h
LCD 100% , Regata mode active and Acces Point active : 4h

Charge time 8h

* *Values obtained by test , may vary depending on environmental conditions*.

Backup Battery

Type ML1220 , 3V rechargeable , 18 mA/h.

LCD

4.0 Inches , 480 x 800 pixels, 16.7 M Colours, Capacitive Touch.

Led Backlight.

Bright : 350 Nit

USB

USB 2.0 compliant , full-speed , 12 Mbps

Com Interface 115.000 baud , 8 data bit , no parity 1 stop bit

Wifi Access Point

Modes supported : 11 b/g/n

Baseband 2.4 GHz

Max speed 150 Mbps

Micro SD

Supported file system : FAT32.

Max storage capacity supported : 32Gb.

Minimum speed class : Class 10 / U1 (UHS Speed Class 1): write speed (10 MB/s).

Dimensions

191 x 123 x 33 cm (L x H x W).

Weight 480 g.

Known Issues:

Baro, Speed:

The pressure, temperature, or velocity graph may show temporary interruptions or cuts in its continuity, this does not affect the data recorded in the Log or the trends shown.

Setup Tools menu:

The selection of the options may not correspond to the state of the button. If when selecting an option the button appears as selected but said function is not really active, you must deactivate and reactivate that option.

Additionally, some values may appear showing 0, if this is the case, exit that screen and re-enter, thus allowing a new update of it.

This is due to the large number of simultaneous processes carried out by the system, in which the capture and processing of navigation data is prioritized.
Observing the information banners is a good source of information about the status of the system and active options.

Logs on micro SD card:

Missing or shifting data may occur due to interruptions in the recording process, mechanical, electrical or magnetic disturbances at the system location, even if this data is available.
If certain data is not available, it will obviously not be saved (for example if we do not receive GPS data).

Files created on the microSD

File names are created using the UTC date and appending a letter at the end that describes the contents of the file.

The content of the file consists of text separated by commas (CSV), easily exportable to any spreadsheet.

Sail

File name DDMMYY+S.txt

Content :

HH (UTC)
MM (UTC)
SS (UTC)
Press
Temp
HHMMSS (Gps)
DDMMYY (Gps)
Dataformat (G = Degrees,Min,Sec, D = Degrees,Min,Tenths of a minute)
Lat
Long
speed
Cogg
Pos Mode (Gps -> N = No fix, E = Estimated/Dead reckoning fix, A = Autonomous GNSS fix, D = Differential GNSS fix, F = RTK float, R = RTK fixed)

Horizontal position accuracy in meters (Gps)
DPS Speed (Tacking speed in degrees per second)
Force G X (Bow-Stern)
G Force Y (Starboard-Port)
G Z Force (vertical - Swell)
Mag Bearing (Magnetic Compass)
Pitch
Roll

Sample :

13,10,49,958.0,21.8,011223,153021,D,41,34.54946,N,002,00.36621,E,0.3,33,A,8.4,0,0.33,0.14,0.76,231,-1,1

Baro

File name DDMMYY+B.txt

Content :

HH (UTC)
MM (UTC)
Temp
Press
Tend 24h
Tend 12h
Tend 6h
Tend 3h
Tend 1h

Sample :

05,19,25.0,1026.2,0.0,0.0,0.0,0.0,0.0

LBS (Low Batt Shutdown)

File name DDMMYY+L.txt

Content :
HH (UTC)
MM (UTC)
SS (UTC)
DDMMAA (Gps)
HHMMSS (Gps)
Lat
Long
Speed
Cog
Vbatt

Sample :

15,54,38,291123,155438,41,34.55390,N,002,00.36990,E,0.1,61,3.57