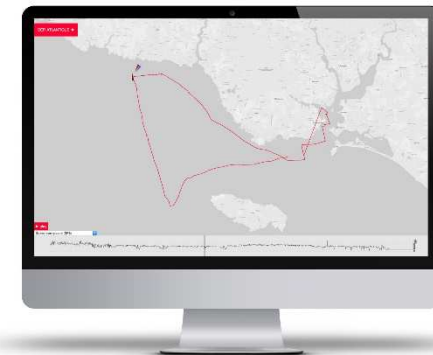
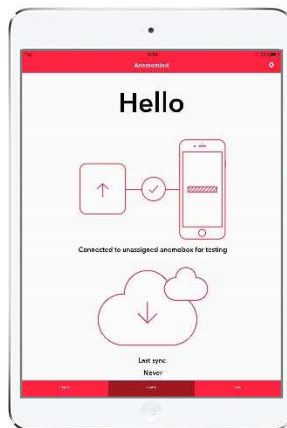




# Installation and start-up of the Anemomind solution



Version 2016-04-06



## INTRODUCTION

This manual contains installation instructions for the solution Anemomind on boats equipped with NMEA compatible electronic systems.

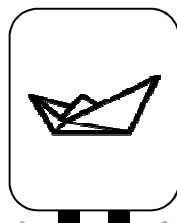
The following points are detailed:

- Installing the Anemobox onboard
- Connecting a smartphone or a tablet and using the iOS application
- Using the web platform to visualize and analyze recorded navigations

The Anemobox is easy to connect on systems using NMEA0183 and 2000 standards, via two integrated connectors (see figure below)



Anemomind Connector for  
12VDC et NMEA0183



NMEA2000 male  
connector



**Make sure the onboard power is switched off before installing the Anemobox.** Unless otherwise specified, always disconnect the power supply before connecting or disconnecting the device.

Positive ground systems:

**Do not connect this unit to a system which has positive grounding**

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  - d. Connecting to a NKE NMEA0183 interface output
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2. Connecting to a NMEA2000 system (B&G, Garmin)
  - a. Direct plugging on a T-connector
  - b. Using a cable and a T-connector
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  - a. Overview
  - b. With a T-connector
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## iPhone and iPad application

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## 1a- Connecting to a NMEA0183 system: overview

### USING THE ANEMOMIND-NMEA0183 CABLE

The Anemobox must be connected to the NMEA0183 central unit using the cable provided and showed hereunder.

This ANEMOMIND-NMEA0183 cable supports:

- Anemobox power supply via **RED (POWER + 9-36 VDC)** and **BROWN (POWER -)** wires
- receiving NMEA 0183 data via **GREEN (NMEA IN+)** et **YELLOW (NMEA IN-)** wires

The Anemobox can also send data to the NMEA0183 unit, such as GPS information, via the **WHITE (NMEA OUT +)** and **BLUE (NMEA OUT -)** wires. Connecting those wires is not mandatory for the proper functioning of the Anemomind solution.



Color	Function
RED	POWER + (9-36 VDC)
BROWN	POWER -
YELLOW	NMEA IN -
GREEN	NMEA IN +
WHITE / BLANC	NMEA OUT +
BLUE / BLEU	NMEA OUT -
(other colors not used)	

### IMPORTANT

Function indications are relative to the Anemobox. Therefore, the **Anemomind NMEA IN wire has to be connected to NMEA OUTPUT plug of the device sending data !**

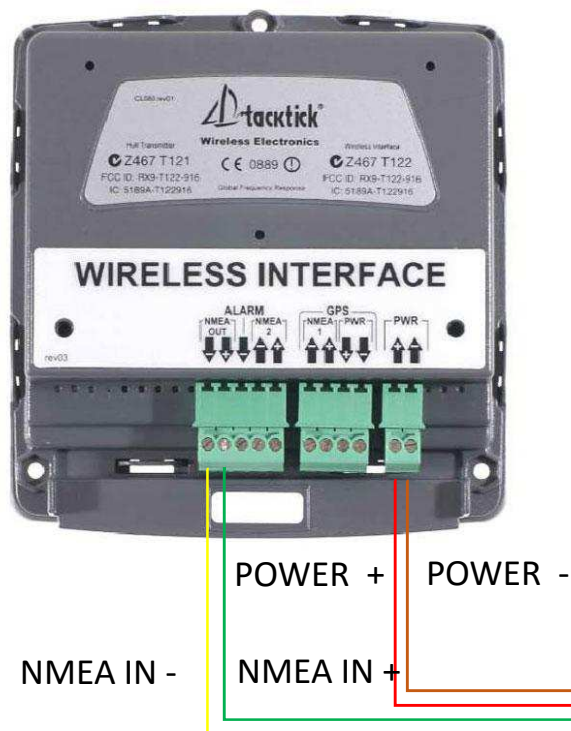
## 1b- Connecting to a Tacktick system

Plug the « NMEA IN+ » (GREEN) wire and the « NMEA IN- » (JAUNE) wire of the Anemobox to arrows NMEA OUT+ and NMEA OUT – of the Tacktick.

### IMPORTANT

- The Tacktick network must have a wireless interface module «T122» for NMEA0183 data exchange
- T122 baudrate is 4800 bps. This is the default on the Anemobox. The baud rate might be adjusted if the settings has been changed (see the related chapter at the end of this document).

### T122



### NOTES

- If T122's NMEA output is already used, it is either possible to use a nmea multiplexer or to connect both wires in the single slot.
- Power supply can also come from another source with a voltage between 9V and 36V, it does not have to be connected to the T122 unit.
- The Anemobox can send data to the Tacktick system by connecting the **WHITE (NMEA OUT +)** and **BLUE (NMEA OUT -)** wires to NMEA2 – and NMEA2 + input arrows.

### REMARK

The Anemobox baudrate has to be set to 4800 (see dedicated chapter)

## 1c- Connecting to a NKE NMEA-WIFI interface

### IMPORTANT

If the boat is fitted with a NKE system, an NMEA interface device (réf NKE90-60-357 ) or a NMEA-WIFI interface device (réf. NKE 90-60-508) is needed to provide NMEA information from the Topline NKE network.

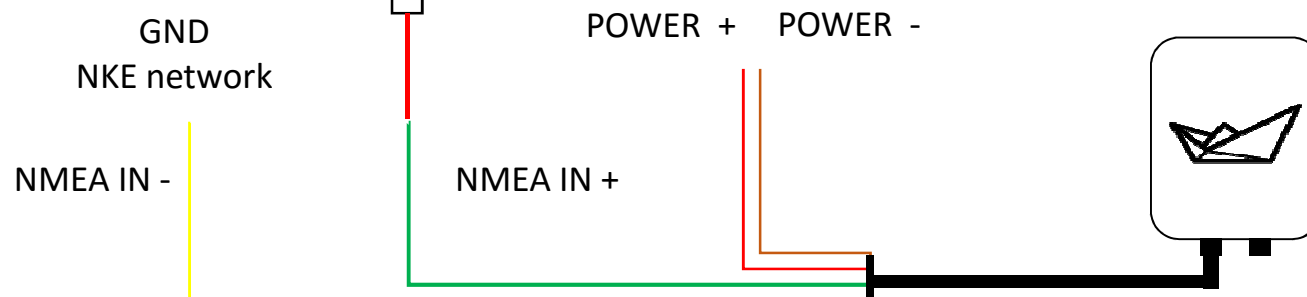
### With the NMEA-WIFI interface (réf. NKE 90-60-508)



Connect the RED wire from the NKE interface with the Anemobox « NMEA IN+ » (GREEN) and a GROUND from the NKE network with the Anemobox « NMEA IN- » (YELLOW).  
Protect the other wires of the NKE interface.

### REMARK

The Anemobox baudrate has to be set to 38400 (see dedicated chapter)



## 1d- Connecting to a NKE NMEA interface

### IMPORTANT

If the boat is fitted with a NKE system, an NMEA interface device (réf NKE90-60-357 ) or a NMEA-WIFI interface device (réf. NKE 90-60-508) is needed to provide NMEA information from the Topline NKE network.

### With the NMEA interface output device (réf NKE90-60-357)

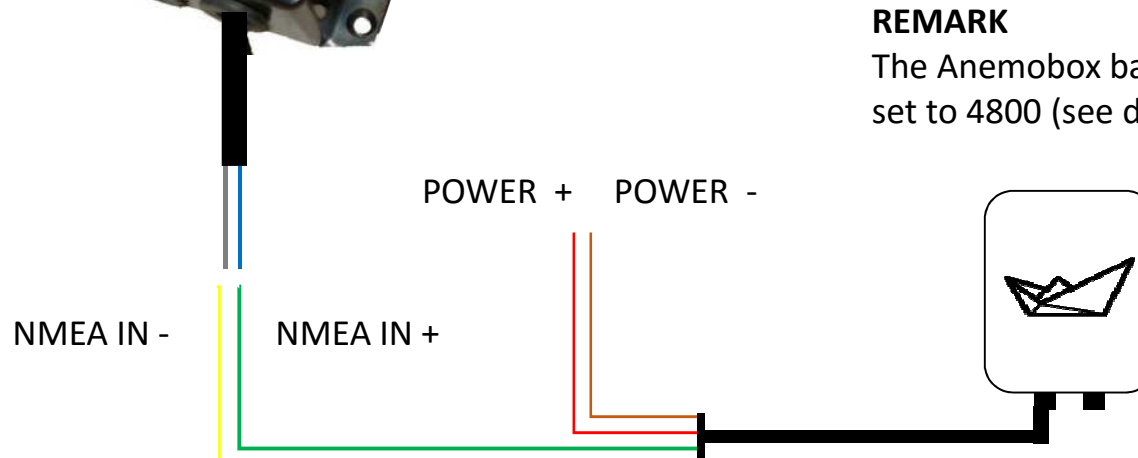


Connect the BLUE wire from the NKE interface with the Anemobox « NMEA IN+ » (GREEN) and the shield from the NKE interface with the Anemobox « NMEA IN- » (YELLOW).

Protect the other wires of the NKE device.

### REMARK

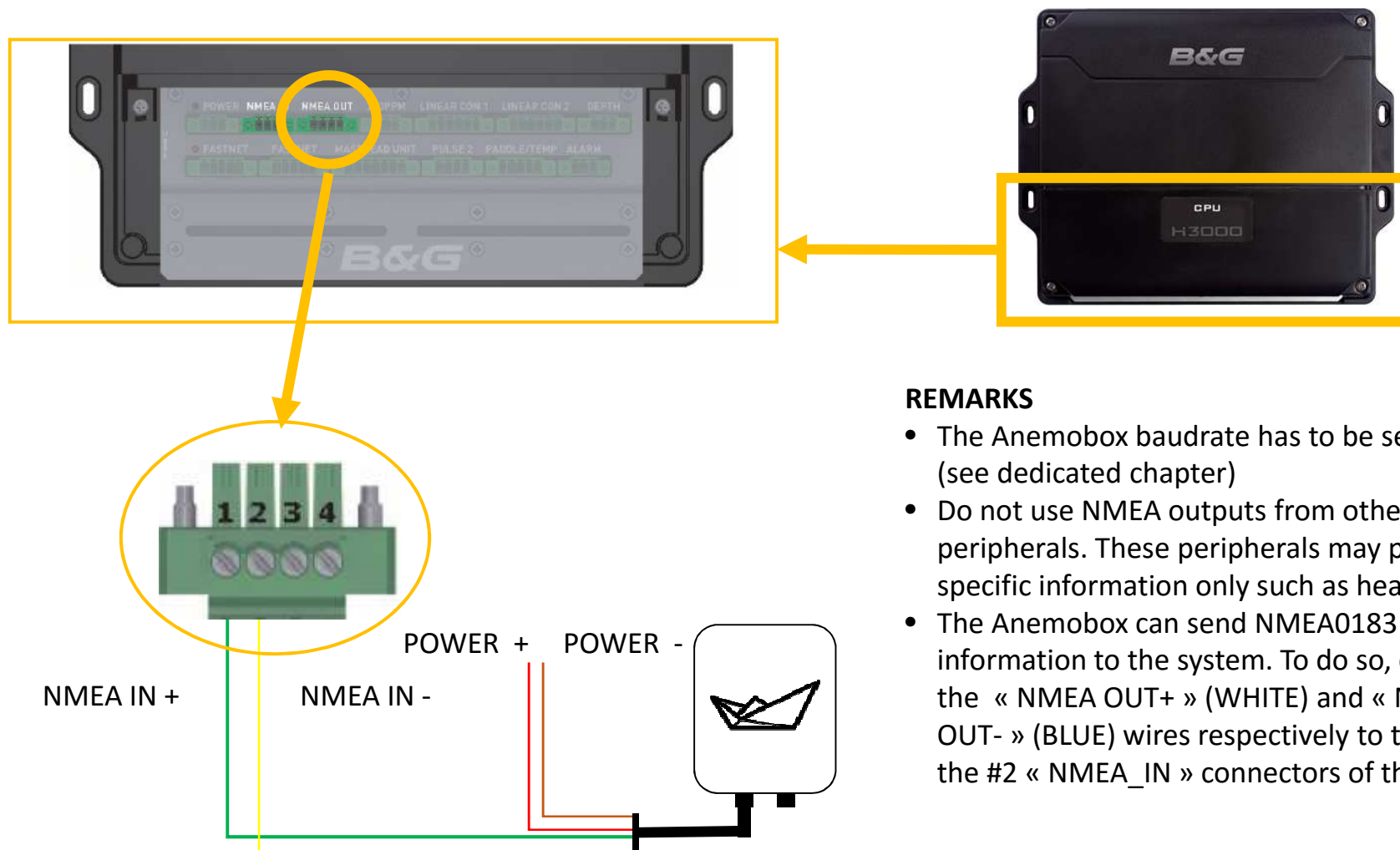
The Anemobox baudrate has to be set to 4800 (see dedicated chapter)





## 1e- Connecting to a B&G H3000 system

Connect the Anemobox « NMEA IN+ » (GREEN) and the « NMEA IN- » (YELLOW) respectively to the #1 and the #2 « NMEA OUT » connectors of the H3000.



### REMARKS

- The Anemobox baudrate has to be set to 4800 (see dedicated chapter)
- Do not use NMEA outputs from other peripherals. These peripherals may provide specific information only such as heading.
- The Anemobox can send NMEA0183 information to the system. To do so, connect the « NMEA OUT+ » (WHITE) and « NMEA OUT- » (BLUE) wires respectively to the #1 and the #2 « NMEA\_IN » connectors of the H3000

## 2a- Connecting a NMEA2000 network - direct plugging on a T-connector

Many manufacturers like B&G and Garmin use the NMEA2000 communication standard or a similar one like SeataalkNG from Raymarine

### Principle

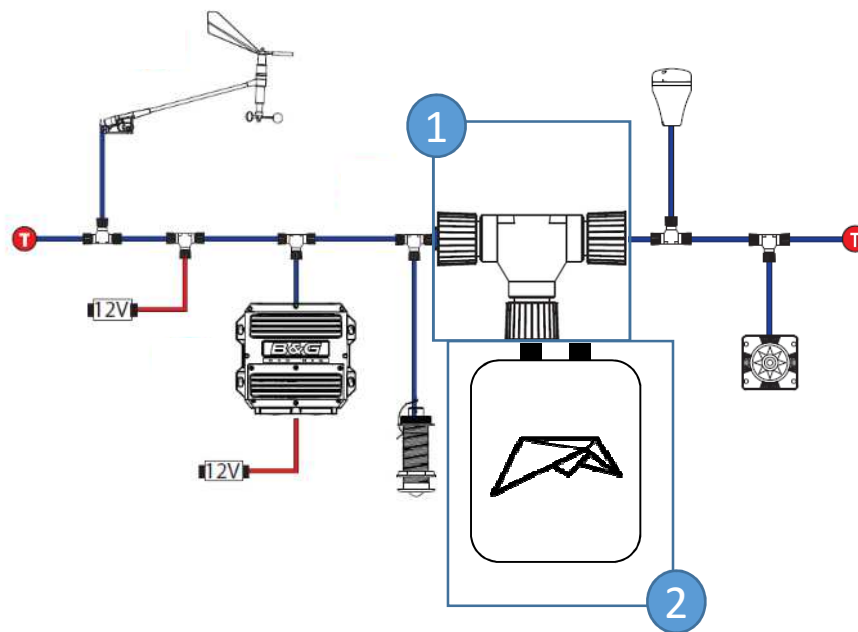
- The NMEA2000 network is structured with a backbone on which various peripherals can be connected (see drawing hereafter)
- The NMEA2000 connection provides signal reception, signal emission and 12V DC power.

### Connectors

Following manufacturers, connecting a device can be done through a T or a multiway block. As adjacent T connection is not possible with Raymarine, an additional connection cable between T's is necessary.

### Direct connection on a T

1. Insert a T on the backbone as shown on the drawing (warning: scale not respected)
2. Connect directly the right connector of the Anemobox to the foot of the T.  
If needed, connect remotely the Anemobox (see next page).



## 2b- Connecting a NMEA2000 network – using a cable and a T-connector

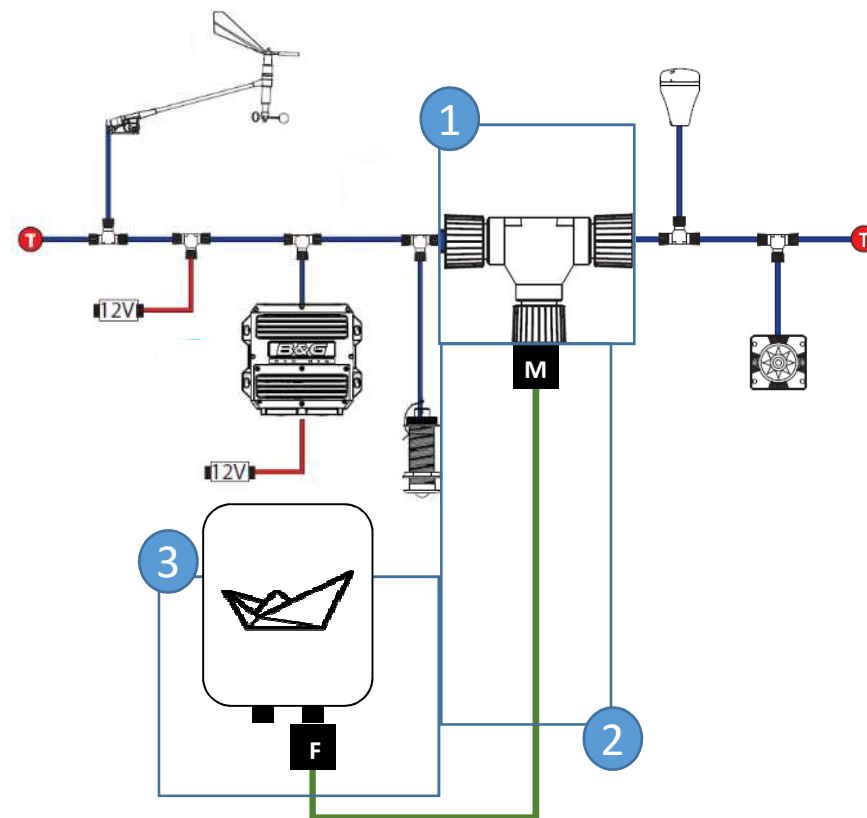
### Principle

- The NMEA2000 network is structured with a backbone on which various peripherals can be connected (see drawing hereafter)
- The NMEA2000 connection provides signal reception, signal emission and 12V DC power.

### Remote connection on a T

Remote connection may be mandatory following the available space near the backbone

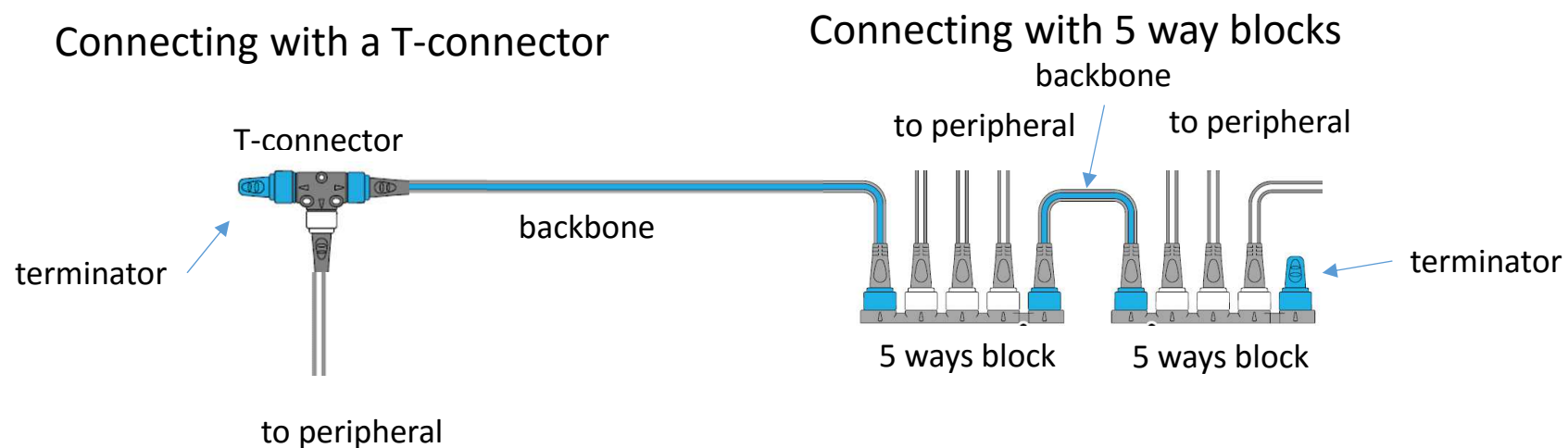
1. Insert a T-connector on the backbone as shown on the drawing  
*(warning: scale not respected)*
2. Plug the MALE side of an NMEA cable into the foot of the T-connector
3. Plug the FEMALE side of the NMEA cable into the right hand side connector of the Anemobox



## 3a- Connecting to a Raymarine SeataalkNG system - overview

### PRINCIPLE

- The structure of a Raymarine SeataalkNG network is similar to a NMEA2000 network: a backbone on which various peripherals can be connected. Only connectors are different and have a specific Raymarine color code:
  - BLUE: backbone
  - WHITE: peripherals
  - BLACK-WHITE: SeataalkNG to NMEA2000
- According to integration constraints, peripherals can be connected through :
  - T-connectors: connecting one peripheral on the backbone
  - 5 way blocks: connecting three peripherals on the backbone
- Connecting a NMEA2000 device on a SeataalkNG backbone is achieved using a dedicated Raymarine cable (BLACK-WHITE)



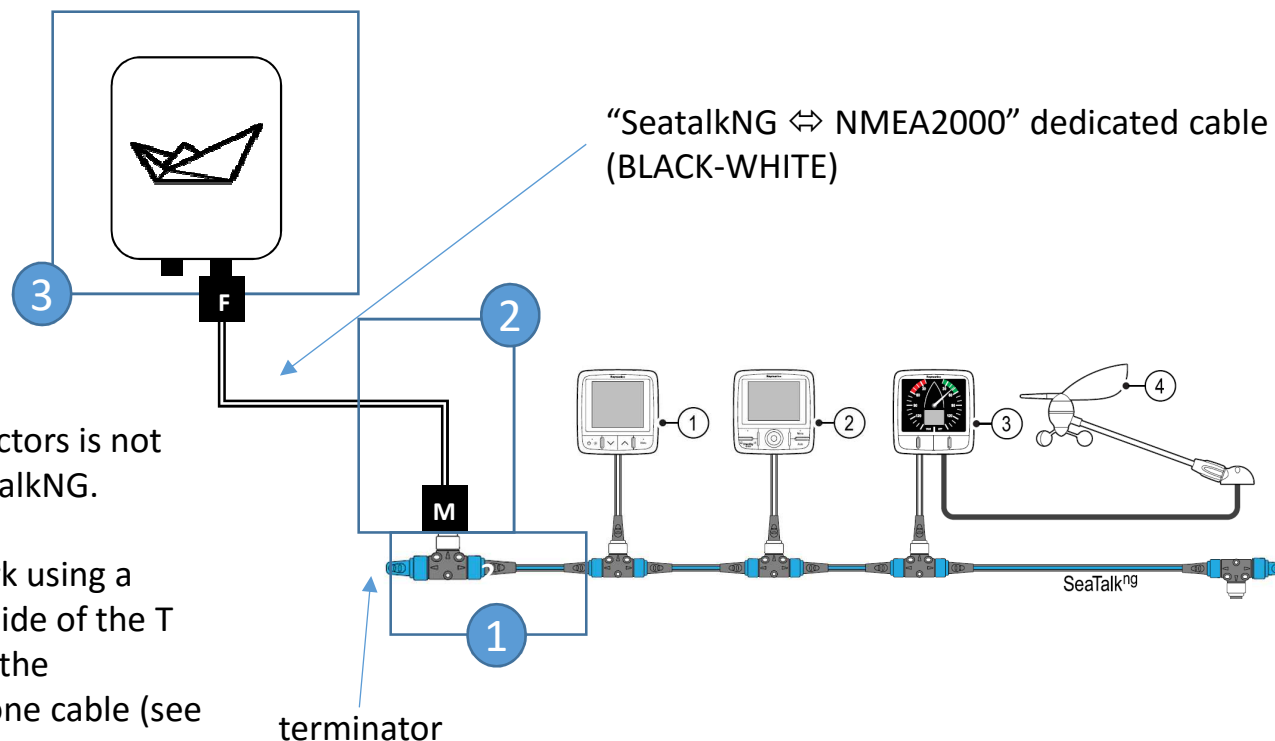
## 3b- Connecting a Raymarine SeataalkNG system – with a T-connector

### REMARK

Connecting adjacent T-connectors is not possible with Raymarine SeataalkNG.

Two possibilities :

- insert the T in the network using a backbone cable on each side of the T
- insert the T at the end of the backbone, using a backbone cable (see drawing)

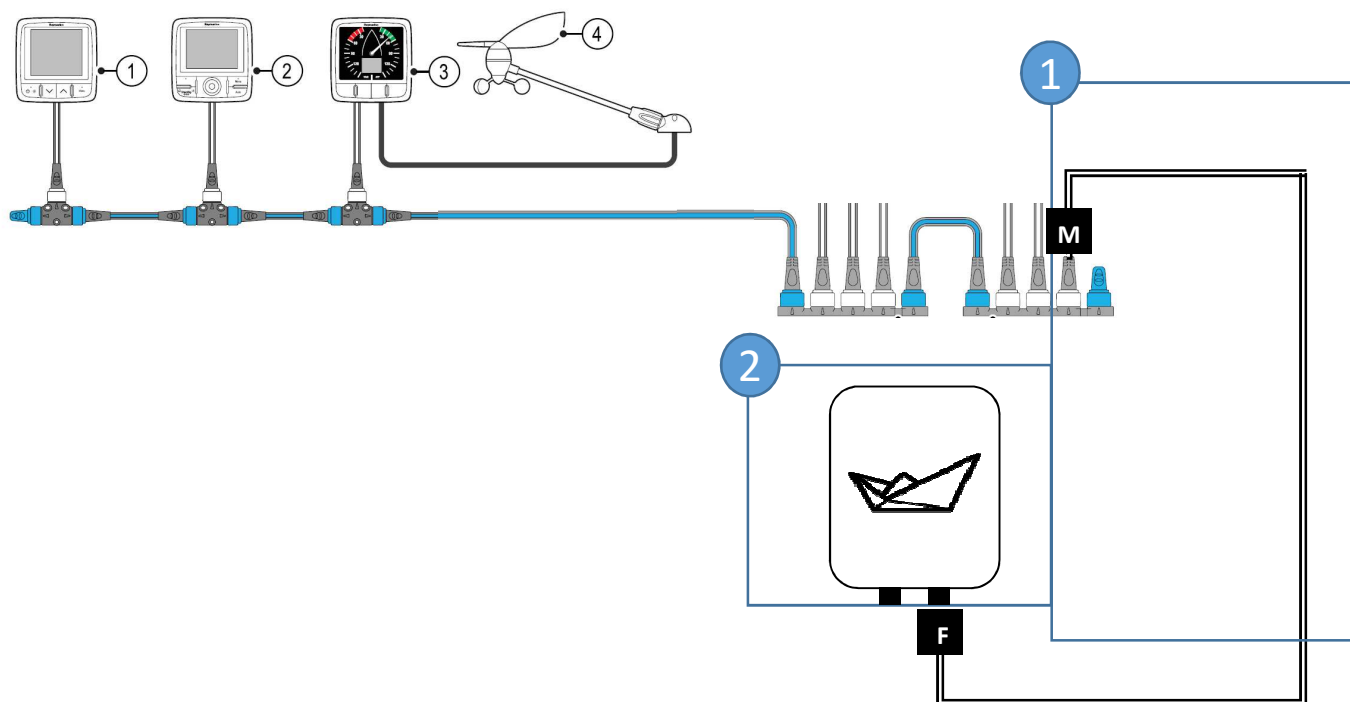


### Connecting with a T-connector

1. Insert a T-connector and a backbone cable at the end of the network. Put the terminator to end the backbone.
2. Plug the MALE side of the BLACK-WHITE “SeataalkNG ⇔ NMEA2000” cable into the WHITE foot of the T-connector
3. Plug the FEMALE side of the BLACK-WHITE “SeataalkNG ⇔ NMEA2000” cable into the right hand side connector of the Anemobox

### 3c- Connecting to a Raymarine SeataalkNG system – with a 5-way block

1. Plug the MALE side of the BLACK-WHITE “SeataalkNG ↔ NMEA2000” cable into an available WHITE connector of the 5 way block
2. Plug the FEMALE side of the BLACK-WHITE “SeataalkNG ↔ NMEA2000” cable into the right hand side connector of the Anemobox



## 4- Connecting an iOS smartphone or tablet

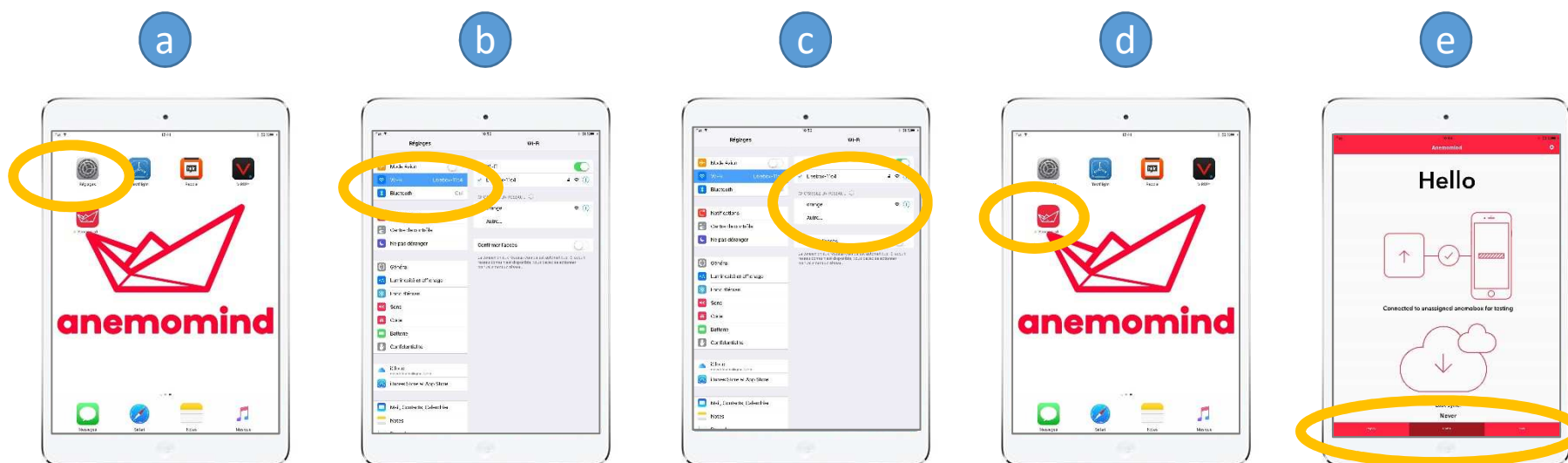
Connecting an iOS smartphone or tablet to the Anemobox uses a dedicated WiFi communication.

**To connect a smartphone or an iOS tablet to the Anemobox,** firstly ensure that

- The Anemobox is powered
- The Anemomind Connect application is installed through the Apple App Store (1- open the App Store, 2- search « anemomind », 3- choose and install « Anemomind Connect »)

then:

- a) Go to the settings menu of the smartphone or the tablet
- b) Click on the Wi-Fi menu
- c) Select the Wi-Fi network of the Anemobox and then exit the settings menu
- d) Open the app Anemomind Connect
- e) Click on
  - « Live » to see boat and wind information in real-time
  - « Replay » to access the stored navigations
  - « Home » to see the status of data synchronization and communication from/to the Anemobox







## 4 Baudrate configuration on the Anemobox (NMEA0183 only)

### PRINCIPLE

The NMEA0183 speed transmission (Baudrate) of the onboard electronic system and the Anemobox must be identical to allow data transfer.

The historical NMEA standard speed is 4800 baud and almost all NMEA0183 devices communicate at such a speed. Actually a few manufacturers, including NKE, use a latest high speed version called NMEA 0183-HS with 38400 baud for their recent interfaces.

In case of communication problem between the Anemobox and the onboard electronic, ensure that the Anemomind baudrate is appropriate, i.e. same as the onboard electronic. Consult technical specifications of the onboard electronic and try different Anemobox baudrates if needed.

In case of de-installation of the Anemobox, make sure the baudrate is set to 4800 again using the Anemomind app.

### Tacktick, NKE and B&G baudrates

Manufacturer	Model	Reference	Baudrate	Configuration
Tacktick	Wireless interface	T122	4800 baud	not configurable
NKE	NMEA output	90-60-357	4800 baud	not configurable
NKE	NMEA-WiFi	90-60-508	38400 baud	configurable *
B&G	H3000		4800 baud	not configurable

(\*) the NMEA output baudrate can also be set to 4800 using the Toplink NKE maintenance software.  
Set the address 10 « baudrate NMEA OUT » to 51712

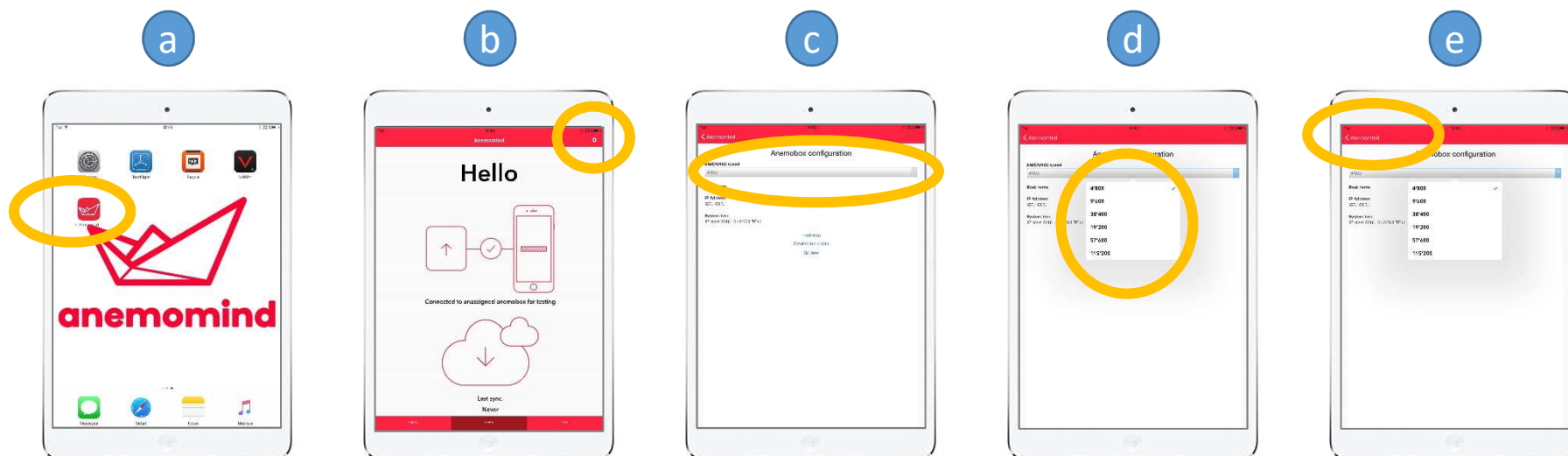
## 4 Baudrate configuration on the Anemobox (for NMEA0183 only)

Use the app Anemomind Connect installed on your smartphone or tablet to configure the Anemobox baudrate.

**To visualize or select the Anemobox baudrate**, firstly ensure that the Anemobox is powered and that your smartphone or tablet is connected to the Anemobox WIFI (see previous chapter).

Then

- Open the app Anemomind Connect
- Click on the « settings » icon on the top right
- Click on the « NMEA0183 speed » menu
- Visualize or select the appropriate baudrate (see previous page)
- Exit the settings menu by clicking on « Anemomind »



## 5- Using the web platform for visualization and analysis of navigations

Navigations are stored and sent to the Anemomind servers (cloud) to be processed for visualization on a map and for analysis. To access your navigations you can use a computer, a smartphone or a tablet using an available internet connection (wired, Wi-Fi or 3G-4G).

Data are secured and only granted users can access and see them.

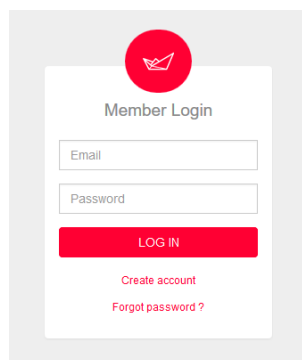
### To visualize or analyze navigations

Open a web browser (Mozilla Firefox, Chrome, Safari, ...) and go to <https://www.anemolab.com/>

Then

- a) Enter your EMAIL and PASSWORD in the connection window to access the visualization and analysis platform. Create an account at your first visit.
- b) The platform opens and you access all your authorized boats. Then you can:
  - 1) Visualize or modify the boat profile and the list of persons whose access is granted by clicking on “details”
  - 2) Visualize the VMG plot showing the boat VMG performance versus the wind speed by clicking on “VMG”
  - 3) Access all the navigations by clicking on “full map”
  - 4) Directly access a navigation by day by clicking on the blue text

a



Member Login

Email

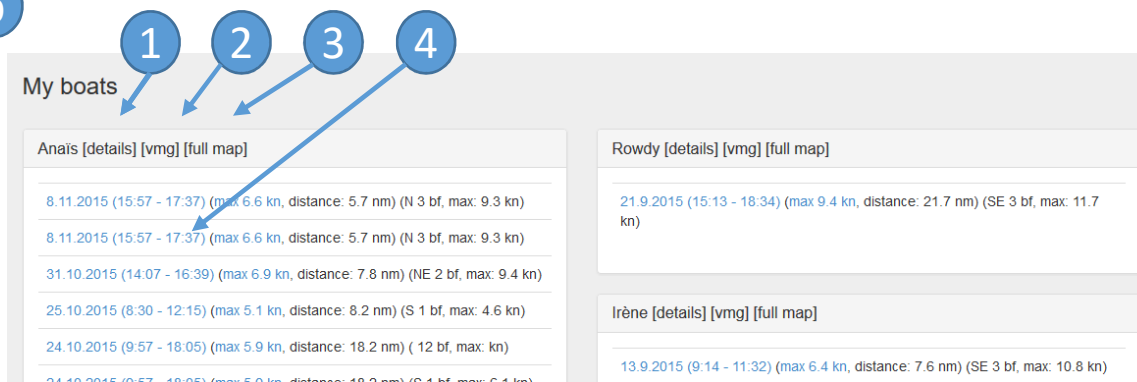
Password

**LOG IN**

[Create account](#)

[Forgot password?](#)

b



My boats

1 → Anais [details] [vmg] [full map]

2 → 8.11.2015 (15:57 - 17:37) (max 6.6 kn, distance: 5.7 nm) (N 3 bf, max: 9.3 kn)

3 → 31.10.2015 (14:07 - 16:39) (max 6.9 kn, distance: 7.8 nm) (NE 2 bf, max: 9.4 kn)

4 → 24.10.2015 (9:57 - 18:05) (max 5.9 kn, distance: 18.2 nm) ( 12 bf, max: kn)

Rowdy [details] [vmg] [full map]

21.9.2015 (15:13 - 18:34) (max 9.4 kn, distance: 21.7 nm) (SE 3 bf, max: 11.7 kn)

Irène [details] [vmg] [full map]

13.9.2015 (9:14 - 11:32) (max 6.4 kn, distance: 7.6 nm) (SE 3 bf, max: 10.8 kn)

## 5- Using the web platform for visualization and analysis of navigations

### To visualize or analyze navigations

Once you entered the visualization page you access the map view and all the navigation details.

You can:

- 1) **Zoom in and zoom out** (mouse roll on a PC and pinch in and out on a touchpad or a smartphone)
- 2) **Replay the navigation** on the map using the play / - / + keys to speed up or slow down the replay
- 3) Switch to other **plots** at the bottom of the screen (menu)
- 4) Switch to other **panels of data** at the right of the screen (menu)
- 5) Enlarge the **pictures** taken during the navigation with a connected device (click on the picture)
- 6) **Localize** where the picture has been taken (click on the hour information in blue)
- 7) Go back to the multi-boat **homepage**

