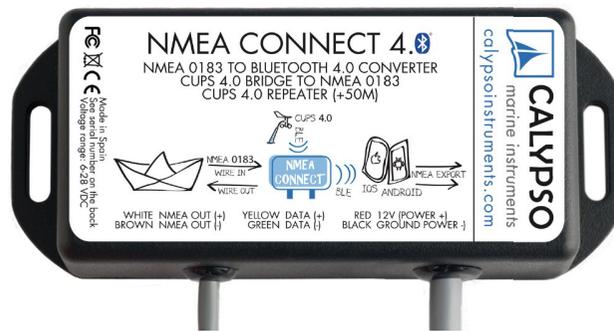


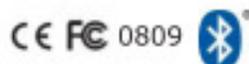
## CALYPSO NMEA CONNECT 4.0 USER MANUAL



### Index

1. Product Overview
2. Package Content
3. Functions
4. Installation
5. Technical Specifications
6. Installing the App and testing the unit

Version:  
VCC.001.2016



## 1. Product overview

Congratulations, you are the owner of a brand new NMEA CONNECT 4.0. A NMEA to Bluetooth Low Energy Gateway, easy to install, simple to use, data logger and compatible with Ios and Android.

- 1- When used on a boat with no CUPS 4.0, it will allow you by itself to get all your current NMEA 0183 data on your smartphone via Bluetooth 4.0 (Real time and export).
- 2- If you own a CUPS 4.0 anemometer, it will communicate the wind data to your boat's NMEA 0183 network and displays.
- 3- It will also serve you as a CUPS 4.0 repeater, extending the range some extra 50m.

1

## 2. Package Content

The package contains the following:

- NMEA CONNECT 4.0 including attached connection cable (30cm)Wind Cups.
- User Manual is printed on the package, latest version available to download at: [www.calypsoinstruments.com](http://www.calypsoinstruments.com).

## 3. Functions

### 3.1 On a boat with no CUPS 4.0 anemometer: NMEA 0183 to Bluetooth 4.0 gateway/converter

NMEA CONNECT 4.0 will act as a NMEA 0183 to Bluetooth network transmitter. Just plug it into your NMEA existing network and it will send all the current NMEA sentences via Bluetooth 4.0 so any BLE mobile

device app can get all NMEA sentences.



### 3.2 When used together with CUPS 4.0 anemometer

!! Only one CUPS 4.0 can be connected to a NMEA network at a time.

#### 3.2.1 CUPS 4.0 BRIDGE to NMEA 0183. Injects CUPS 4.0 data to your NMEA network

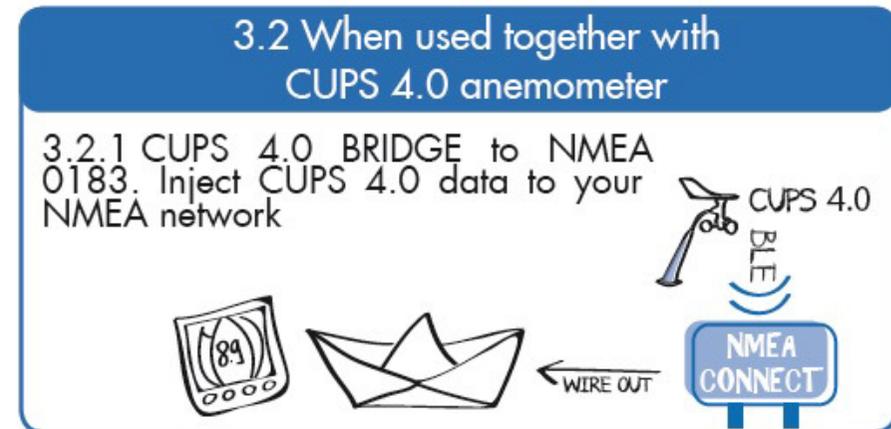
All the anemometer data will be injected in your NMEA 0183 boat network. This allows to have your NMEA network data at the same time on both, your smartdevice and your boat network

NMEA CONNECT 4.0 receives via BLE apparent wind (speed and direction) from CUPS 4.0, Then it converts the BLE signal to NMEA 0183 sentences that are injected into the NMEA boat network, through wire connection.

NMEA CONNECT 4.0 let you show CUPS 4.0 anemometer data on any NMEA 0183 display. It also allows all data (anemometer and existing

NMEA 0183 network data) on a smartphone

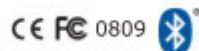
- You can use your existing display.
- If your Anemometer is broken, but you have a functioning display, you can use your CUPS 4.0 plus NMEA CONNECT 4.0 and re-use your current display.



#### 3.2.2 CUPS 4.0 repeater

Use NMEA CONNECT 4.0 to extend CUPS 4.0 range on another 50m. CUPS 4.0 BLE radio sends the signal to the NMEA CONNECT 4.0. The NMEA CONNECT 4.0 BLE radio chip relays the signal.

CUPS 4.0 BLE radio chip emits a signal with an aprox. 50M range. If installed within that range, NMEA CONNECT 4.0 will get that signal and will relay it using its BLE radio chip. NMEA CONNECT 4.0 range is aprox. 50M (Open space).



## 3.2 When used together with CUPS 4.0 anemometer

### 3.2.2 CUPS 4.0 repeater



## 3.3 DATA LOGGER. NMEA BOAT DATA + CUPS 4.0 TRANSMISSION

NMEA CONNECT 4.0 BLE radio chip transmits all data received via BLE, so any compatible App can receive and use it.

### 3.3 Data logging with Anemotracker app

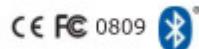
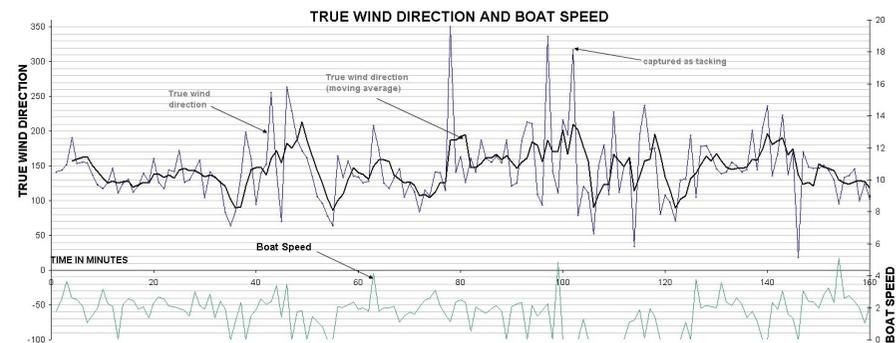


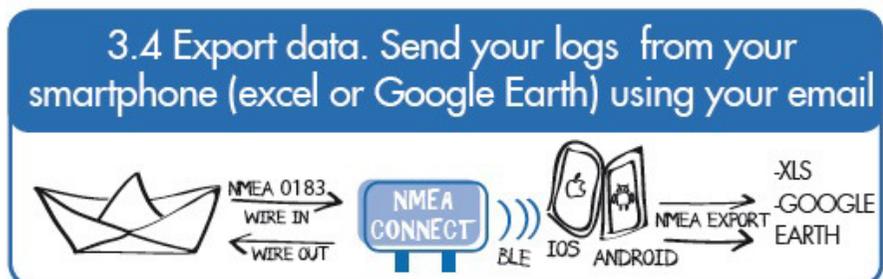
DEVICES CONNECTED	EXPORTED DATA
Only CUPS 4.0 is connected	Only CUPS data is logged/exported
No CUPS 4.0, but connected to boat NMEA network	Only boat NMEA network will be broadcasted
Both, CUPS 4.0 and boat NMEA network connected	Both cups and NMEA network data is logged/exported

Note: Data goes directly from the instrument to your smartphone. No third party/cloud server is used.

## 3.4 DATA LOGGER AND EXPORT DATA

This simple export feature built in the app opens a world of metrics to the technical user. Data logging files are exported as plain excel files so each user can build his own graphs and metrics. Files can be exported as Google Earth files too, making the tracking experience more enjoyable.





## 4. Installation

!! Before you start the installation make sure all power sources are off!  
 To install your device, please follow wire it to your current NMEA 0183 network using this code color reference:

NAME	COLOUR	DESCRIPTION
TALKER A	WHITE	NMEA OUT (+)
TALKER B	BROWN	NMEA OUT (-)
LISTENER A	YELLOW	NMEA IN (+)
LISTENER B	GREEN	NMEA IN (-)
SHIELD	RED	POWER (+)
GROUND	BLACK	GROUND (-)



Default mode settings (configurable with ANEMOTRACKER App)

- \* *Transmisión rate:* 4800 bauds. Most NMEA 0183 devices work at 4800 bauds. Certain devices such as some AIS AND plotters work at 38400 bauds. use ANEMOTRACKER App to choose the preferred transmission rate.
- \* *Reconnect to last CUPS 4.0 used.* This option can be disabled so user can manually select on the app the CUPS unit to be linked to NMEA CONNECT 4.0.
- \* *Injects CUPS 4.0 data into the NMEA network.* User can configure wether or not CUPS 4.0 should be injected into the NMEA network. This feature would be useful if both, a CUPS 4.0 and another anemometer are present onboard

## 5. Installing App and testing the unit

Follow the next steps:

Make sure your device is BLE compatible. NMEA CONNECT 4.0 Works



with Android 4.3 or 4.4 or iOS devices (iPhone 4s, iPad 3<sup>rd</sup> generation or beyond).

- \* Download and install ANEMOTRACKER App on your device from Google Play or App Store.
- \* Once the App is installed start it and open the menu by a long press on the menu icon.
- \* Please enable Bluetooth connection, and press "Scan BLE sensors" on the ANEMOTRACKER App, and all NMEA CONNECT 4.0 and CUPS 4.0 within the range should show up identified by a unique number. Select your NMEA CONNECT 4.0 device and connect.
- \* If your device connects with the CUPS 4.0 correctly, continue with the normal installation. If not, please read next chapter.

Once your smartphone is linked to your NMEA CONNECT 4.0, the latter will automatically connect with a CUPS 4.0 if found within the range. Go to the NMEA CONNECT 4.0 configuration page on the App and choose your transmission rate. Automatic/ Manual CUPS 4.0 connection. Continue with the normal installation and start using your new NMEA CONNECT 4.0.

In case of malfunction, please read the following chapter. If the problem persists, contact calypso instruments at [info@calypsoinstruments.com](mailto:info@calypsoinstruments.com)

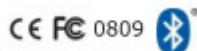
## 5.1 Troubleshooting

### 5.1.1 Your device is compatible with NMEA CONNECT 4.0 but your smartphone can't detect the NMEA CONNECT 4.0

- \* Make sure that all the cables are properly connected to the boat panel.
- \* Check power using a tester
- \* Make sure you have followed the correct color code.
- \* Place your device near to the NMEA CONNECT 4.0 to avoid interferences and try to connect again.
- \* Make sure BT (Bluetooth) mode is running on your smartphone, Tablet or PC.
- \* Make sure no other device is linked to your NMEA CONNECT 4.0. Each unit can only be connected to a single device at a time. As soon as it gets disconnected, NMEA CONNECT 4.0 is ready to link to any other device with the ANEMOTRACKER App installed.
- \* Turn off the wi-fi on your smartphone and try to connect again. (Your wi-fi signal can disrupt the BLE incoming signal)

### 5.1.2 Is your device compatible with the CUPS 4.0 but you can not connect?

- \* Make sure **BT (Bluetooth) mode is running** on your smartphone, Tablet or PC.
- \* Make sure **CUPS 4.0 is not on hibernate mode** by rotating both Cups and Vane. The device hibernates after a few minutes static



(both for energy saving and transportation purposes).

- \* If the device has not been exposed to any source of light for an extended period of time it might be necessary to keep it under direct sunlight for a few hours. A cloudy day will work too.
- \* Make sure **no other device is linked to your CUPS 4.0**. Each unit can only be connected to a single device at a time. As soon as it gets disconnected, CUPS 4.0 is ready to link to any other device with the Anemotracker app installed.

For further information please contact Calypso Technical Support [info@calypsoinstruments.com](mailto:info@calypsoinstruments.com) or visit [www.calypsoinstruments.com](http://www.calypsoinstruments.com).

## 5. Technical Specifications

TECHNICAL DATA	
Connection range	50 m
Data interfaces	RS422
Data format	NMEA0183
Baud rate	4800/38400 (8n1)bauds
Connections	1 device
Voltage range	6-28 V
Power consumption	50-100 mA
Cable	30 cm
Dimensions	100 x 50 x 25 mm
Weight	55 g
IP rating	IP67
Surface mounting	2 screws, diameter 3mm

**DISCLAIMER:**  
*This product is for leisure purposes exclusively. Any wrongful use given by the user will not incur in any responsibility of Calypso Instruments. As well, any harm caused to NMEA CONNECT 4.0 by a mistaken use will not be covered by the guarantee. **Using the device for other purposes or without following this manual will void the guarantee.***



C/ San Jorge, 1, 4º B  
 50001 Zaragoza  
 Spain  
 Telephone number: +34 901 955 974  
 Fax: + 34 901 955 109  
 E-mail: [info@calypsoinstruments.com](mailto:info@calypsoinstruments.com)

Calypso Instruments is a Trademark of  
**Prodeo Ingeniería y Consultoría**

