

ULTRASONIC

ID.	QUESTIONS	ID.	ANSWERS
1	How many devices can be linked to the same ultrasonic?	1	ULTRASONIC only allows ONE device linked at a time. If you want to use a different one, you should disconnect the first device, and connect the new one. It's a fairly and fast change that will take you less than a minute.
1	How can identify my ultrasonic portable among several units within my device bluetooth range?	2	Each ULTRASONIC Portable shows a unique ID when it's paired with your device. There is an option within the App where you can rename your ultrasonic, thus it will be easier to identify your ultrasonic. The number should be printed on your box and/or the ULTRASONIC sticker. You can also write it down the first time you connect it, since it will not change over the time. That ID will appear in the App when you scan for devices, so you will be able to locate yours. Se pueden identificar en la app-Rename it
1	Is the ultrasonic compatible with NMEA?	3	The ULTRASONIC Portable is compatible with NMEA Connect. Through Bluetooth, the portable sends data via bluetooth to the NMEA Connect box and this send the signal via Bluetooth, NMEA or WIFI. ***NMEA CONNECT BOX will be launched along next months.
1	Is the ultrasonic firmware upgradable?	4	Yes, definitely. You will get new firmware updates via Bluetooth with lots of new features and improvements. Via bluetooth can be done in the ultrasonic that have bluetooth capabilities (PORTABLE, WIRED BLE and WIRED WIFI). The WIRED STANDARD firmware is upgradable via cable.
1	Will the ultrasonic work on a rotating mast?	5	No, the unit does not compensate for mast rotation. However, some katamaran sailors do mount the unit between the hull. Please ask us for further information.
1	What is the distance range of my ultrasonic portable?	6	The BLE radio chip integrated on the device has a nominal value of 50m. During in-house testing we have reached up to 80 m range on an open space, at the same level and keeping transmitter (ULTRASONIC) and receiver (Nexus 5) at the same positions along the test. Range will depend upon transmitter-to-receiver direct visibility, your device antenna performance, electromagnetic environment (electrosmog), etc.
1	What happen if my unit gets blocked?	7	The ULTRASONIC Portable restarts after 10 minutes thanks to the system called "watchdog". You simply have to reset the application again and it will work again correctly.
1	Ultrasonic portable is IPX8, what does it mean?	8	The Ultrasonic Portable has been certified by an approved independent laboratoty as IPX8. In order to get that IPX8 code certification, ULTRASONIC Portable has successfully passed a 30 minutes water immersion test at a depth of 10 meters (1bar) with no water ingress. We have also run more severe tests in house with successfull results (even though they are not certified). However, reaching IPx8 30 min-10 m does not yield warranty of waterproofness at 10 m. The same rationale applies to swimming watches; a watch needs to be tested at 30-50 meters depth to be considered water-resistant at a swimming depth of around 1 meter. For going deeper than (snorkeling, diving) watches are individually tested up to 200-500 m! Several factors might affect Ultrasonic watertightness: rubber seals and plastics wear and tear, drastic temperature changes (hot air then cold water), previous impacts, pressure increase rate (immersion velocity), water density and temperature, under-water speed and acceleration, ... This is why we do certify that our Ultrasonic is IPX8 30 min-10 m but we cannot warranty that is waterproof at 10 m.
1	Is it wise to go mobile onboard?	9	The Ultrasonic Portable is a great device to take on board.
1	I touched the metal circles (TRANSDUCERS) and my device does not work correctly	10	User manual states "Do not attempt to access the transducer area with your fingers" . Please, contact to us to get a solution to repair your device.
1	Have you got any problem with the connectivity?	11	Follow to User_manual_NMEA_Connect_4.0_v.001 on our website
1	Should my ultrasonic be mounted flat?	12	A minor deviation from the flat position should not affect the readings. However, it is better to mount the Ultrasonic Portable in perfect position in order to avoid any turbulences.
1	Can I transmit data directly to a server?	13	You can develop your own App. The protocol is open. See an example on the following link: https://github.com/decipherindustries/signalk-calypto-ultrasonic
1	Is the communication protocol bi-directional and can we operate the unit remotely-reconfigure, power off, set power-on timer?	14	On the following link you can find the necessary steps in order to operate remotely. https://drive.google.com/drive/folders/1hEdtK_Fog1rO1qrGmQjtPfq9knWIDLcl
1	Can we modify the communication rate?	15	Currently, is possible to select between 1hz, 4hz and 8hz using our Anemotracker APP. Not yet. The next firmware update (it is updatable via Bluetooth) it will be possible.
1	How can I change the baudrate of my ultrasonic wired+BLE?	16	The change of bauds rate is not implemented into the app. It's done with NRF CONNECT or whatever BLE utility. It's a one-shot modify, saved into the flash for further connections. Please, ask us for the NRF Connect if necessary.
1	What maximum string lengths should I expect?	17	Less than 40 caracters.

1	Should I expect a special termination character?	18	Yes, you should use <CR><LF> termination.
1	I have connected the anemometer configuration wires to GND and 3V voltage source and it doesn't work	19	Ultrasonic only works with a power source between 5 and 24V. Any power above 24V or below 5V we don't ensure that it works properly. Diferencia entre los viejos 5V. y ULP 485 3,3V
1	I don't get any reading.	20	The device have a filter and it doesn't measure wind speed below 1m/s like all ultrasonics of the market. pREGUNTAR A ANGEL PERO 1M/S
1	Solar not charging because of dirt	21	Any indication of dirt on the solar cell may block the power generation. However, we have not experience any problem with dirt since usually it gets washed out because it dissapears before the batttery is over.
1	Is 5V supply really enough for the ULTRASONIC Wired Standard? How much power it requires?	22	Yes, It is enough for the Ultrasonic Wired Standard.
1	What kind of maintenance should be done after sailing season is over?	23	The correctly form is been sure that your device is not wet because it could damage your device. Be sure too that the solar cell is clean. Clean it with a wet cloth.
1	What to do when the sail season start?	24	If your device has a solar cell, first of all, clean the area with a wet towel. Then, it is probably that the battery is discharged, so the better way to charge it is putting under a LED lamp (it must to be close) and wait a pair of days.
1	I don't understand how I should read the wind direction, since that is an unsigned integer in the range 0 - 360°. Is 360° the bow reference?	25	Wind range is 0° to 360°. The bow reference is the north mark which is noticeable on each device (see the manual if doubts).
1	Do you use the gyrosensor to filter the wind output?	26	No, we don't use it to filter wind output. However, the gyrosensor signal is also send continuously and some third party apps may use it this feature to filter thw wind.
1	What APPs are compatible with my device?	27	If you have a Bblueetooth unit, then ANEMOTRACKER APP is compatible. Some other APPs are also compatible buy we cannot continuously check which are compatibles. As far as we know (SailRacer, Weather4D, iEstela, Sentinel Marine Solutions

NMEA CONNECT

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2	Can I use it by its own?	1	Yes. If used on its own on a boat, it will allow you to get all your current NMEA 0183 data on yout smarphone via BT 4.0 (Real time and export)
2	How can I export all the data?	2	With your ultrasonic you can export the data you have tracked (if you have chosen the option to track your navigation). There are two options to export data: exporting to Google Earth or to an excel file. Refer to the manual for further explanation.
2	Can I use NMEA connect 4.0 as a range extender?	3	Yes. as a Bluetooth range extender
2	What about the installation, is it simple?	4	Yes indeed, the only thing ypu have to make sure is that all the power sources are off before you start the installation, and follow the manual included in the package. If you have any question you can check the quick start guide.
2	I can not connect my device with an app other than ANEMOTRACKER	5	As default we only control issues regarding ANEMOTRACKER app. Protocol is open and many developers have developed their own. If you cannot connect to other app we recomend to get in touch with the appropriated app.
2	Can I use the NMEA Connect bridge's bluetooth to receive the wind data from ultrasonic wireless?	6	Yes, you can
2	Can the NMEA CONNECT OUTPUT go to my AIS/GPS/... input?	7	Yes, it can.
2	Right now my AIS/GPS/... NMEA CONNECT output is connected to the plotter, can I split the wires going to the plotter so they also go the nmea bridge's input wires?	8	You can connect your AIS/GPS output to the NMEA Connect 4.0 input, and the NMEA connect 4.0 Output to the plotter.
2	Can I get the magnetic and hell trim data from the ultrasonic on my NMEA network with the NMEA connect?	9	No, you can't.
2	Can the Wi-Fi model act as a client so we can receive data / can we connect via serial and send the data using our own methods?	10	Ultrasonic Wired Wifi, sends by both by cable and Wi-Fi (AP or Infrastructure) the data generated by the wind equipment (wind, gyro, compass). The equipment does not forward the data from the NMEA CONNECT bus via Wi-Fi; it only outputs the NMEA wind equipment data not the NMEA CONNECT input.

2	I have measured more than 35mA of power consumption	11	Probably you see some spikes from Bluetooth signal, this is a normal behaviour, but in average the power consumption is about 35mA
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ANEMOTRACKER APP

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3	When I am trying to connect my device to app more devices appear.	1	Locate your product by standing very close your unit to your smartphone. The closest device will show the closer to zero gain (-20dB is closer than -40dB). Once you make a first connection you can name that particular unit using your anemotracker app. This will make easy to find your unit again
3	Where can I find the serial number?	2	You are able to find the serial number of your device printed on the box, or on a label in the same product. The serial ID will also be shown on top area of the app menu
3	How can I download the tracking data?	3	Tapping on "export xls2" or "export kml" you could download all data.
3	Can I change the values that appear in each of the display boxes of the app screens?	4	Yes, if you push during some seconds where the values are it will scroll down a menu where you can choose the variables and the units.
3	Can I track without internet connection?	5	Yes, you can track your data without internet, but you can't view that information in the app map screen. When you have internet connection, you will be able to view your track
3	I don't find my device when the app starts	6	Restart the app and try again, sometimes the app can't identify all the devices that have around it
3	I have started my app but nothing appears, only a white screen	7	Just restart. Make sure your smartphone is compatible. If the problem persists, please contact us at aftersales@calypsosinstruments.com
3	I have some problems with the compass calibration, the app doesn't count well the turns	8	When you finish the first turn to the device and the app does not mark the correct value then you should do a second turn. If the problem persists, you should cancel the calibration and restart the process. If you finish the turn and it does not added, you should added automatically as explained in point 3.4 of the manual.
3	What do the abbreviations on the main screen stand for?	9	TWA - True wind angle AWA - Apparent wind angle TWM - True wind module / True wind speed Roll - Heel angle Pitch - Tilt boat
3	What is the "V" and the "T" on the Compass?	10	The "V" is really an "A" (upside-down) and it means "Apparent", and the "T" means "True"
3	How can I change the variable and the unit shown in each display?	11	You can change the variables and units shown in each display with a long press on the any of the four squares that appear on the main screen.
3	I tilt the anemometer but roll and pitch shows -90 degrees stable, why?	12	Your gyroscope sensor is off by default for energy saving reasons. Please go to the menu and activate the "enable gyro" function.
3	Hardware and software compatibility	13	Sailing Anemotracker App will run on all type of iOS and Android devices. ULTRASONIC Portable ONLY will connect to smartphones and tablets with BLE chipset running Android(4.3, 4.4 or beyond) or iOS(iPhone 4s, iPad 3rd generation or beyond) using Sailing Anemotracker App. Make sure your device has the correct version of Android or iOS.
3	Version of android or IOS of your smartphone	14	First, open Settings on your device. Then, Scroll down and tap About phone. If you don't see the option, hit System first. Finally, look for the "Android version" section of the page. The number listed in this section, e.g. 6.0.1, is the version of the Android OS your device is running. If you have got an Apple device, locate and open the Settings app. Tap General. Then, tap About. Finally, look for "Version", and the number that is beside is the information that you are looking for.
3	How can I start using the anemotracker app	15	Refer to the Anemotracker app on our website for further information.
3	Does the app work offline?	16	Yes, ULTRASONIC will connect and will work fine with Anemotracker App with no internet connection. However, you won't be able to use the google maps windows until you get access to the internet

3	Will my sailing anemotracker app get data from a boat close to mine when racing?	17	No! As any other bluetooth device, the communication is protected. Once you pair your smartphone with your ULTRASONIC Portable unit, no other smartphone can communicate with it. BT connection only allows connect with one device at the same time. So, if you are connected with your ULTRASONIC, your smartphone couldn't be connected with another device placed in another boat.
3	I can not connect my device with Anemotracker App	18	First of all uninstall and install again out app. If the problem continue, be sure about have install the last firmware version. You can see how in section "Firmware"

ACCESORIES

ID.	QUESTION	ID.	ANSWER
4	Which accesories could I buy to install my Ultrasonic Bluetooth Windmeter on the mast top?	1	The device has a M16x2 thread (length 16 mm). We recommend using either our mast mount or one of our poles (aluminum o carbon fiber). You can also design and make your own mount. We designed the unit to be easy to mount using universally available parts.
4	Are the mounting threads on the Ultrasonic Wired Standard M16x2 or M16x1.5? The website page for the carbon fiber and aluminum poles say "M16x1.5", but the website page for the Mast Mount Bracket and the manuals for the Ultrasonic Wired Standard says "M16x2.0	2	They are M16X2 thread (length 16mm)

COMPASS

ID.	QUESTION	ID.	ANSWER
<p>This product is a wind sensor instrument and it has been engineered for the sole use of accurately measure wind speed and direction using ultrasonic transducers. The product includes some secondary sensors in addition, such as thermometer, compass, gyroscope and accelerometer. These secondary sensors are not meant to be user. Sensor are also useful for developers and profes-signal. For instance, having a temperature reading does not turn the wind instrument into a sun-shielded scienti-precision compass, etc...These secondary sensors are not calibrated and should not be used.</p>			
5	If I put my Portable near a compass one or both don't work correctly	1	Ultrasonic Portable has internal batteries and thus it does affect the magnetic field around. Thus, it will affect the reading of an external compass if located closeby. On the other hand, a traditional compass will modify the magnetic field around the wind meter if
5	The compass of my ultrasonic makes wrong readings	2	Try to recalibrate the compass of your ultrasonic. Please, find the information in the manual.
5	What happend if the Low Power Mode is automatically activated on my wind sensor?	3	On Low Power mode, all secondary sensors get disabled for energy saving purposes (gyro/compass/accelerometer)
5	I am going to install my device, is necessary to recalibrate it?	4	Yes. You need to calibrate your compass depending on your geographical area to compensare magnetic declination and depending and on the magnetic nature of your boat to compensare magnetic deviation.
5	I calibrate the compass but it doesn't work fine	5	Repeat compass calibration turning the device slower, to minimize deviation. Still, this is a secondary sensor and it will not deliver the features of a professional dedicated compass.
5	Is the e-compass also referenced to the orientation mark, or is that an absolute value relative to the magnetic north?	6	It is absolute value referenced to the orientation mark that should be pointing the bow of your boat
5	How can I recalibrate the compass of my ultrasonic portable?	7	Refer to the User Manual on our website
5	I want make a compass calibration, but I can't	8	Check you have activated the clinometer option. Then follow the steps that appear in the manual.