

User Manual



1. GENERAL INFORMATION

1.1. Information and Explanations for the Operating Instructions

This manual is intended to assist and familiarize you with the NMEAString device and to provide you with the information needed for its safe and proper operation. Please read the entire manual before using the NMEAString device for the first time.

To minimize the risk of injury and to avoid damaging the device, please do not use the NMEAString until you are sure that you have fully understood this manual. We are not liable for personal injury, property damage, damage to the device caused by improper handling or incorrect use of the NMEAString Instrument or injury resulting from failure to comply with the safety regulations contained in this manual. Please contact our support team with any questions.

1.2. Device Description

This device can calculate the rotation angle of the mast with the help of a string that is attached to to the mast. Once the mast rotates, it will pull and release the string in a linear way, allowing the NMEAString to record this values and compensate the wind data.

The device can be used together with the OpenWind or independently.

1.3. Safety and Handling

1.3.1. Repair

Do not attempt to open and repair the NMEAString on your own. Disassembling the device will void the warranty and can cause permanent damage and personal injury. Contact support if your NMEAString is damaged or malfunctioning.

1.3.2. Radio Frequencies

NMEAString uses wireless signals(Bluetooth Low Energy) to connect to the OpenWind instrument. It was designed, tested and produced to be compliant with radio frequency emission complies with all regulations.



2. TECHNICAL SPECIFICATIONS

2.1. OpenWind NMEAString

Dimensions	60mm height x 95 mm diameter
Weight	280 grams
Operating Temperature	-20 ° to 70° C
Input	4,5 to 28V
Power consumption	30 mA
OpenWind Connection	Bluetooth version 4.2
OpenWind Connection Range	100 meters with no obstruction
Communication	NMEA2000 or NMEA0183
NMEA2000 Connector	Male Connector
NMEA 2000 Output Data	PGN Atitude - 127257 PGN Wind - 130306 PGN GPS - 129026 PGN Heading - 127260
Data rate	10Hz
cable dimension	2, 3 or 5 meters



3. ASSEMBLY INSTRUCTIONS

3.1. NMEA2000 cable assembly

Simply connect the NMEA2000 male connector to your vessel's NMEA2000 Network. In order to connect via SeaTalkNG, use the Adapter SeaTalk NMEA 2000 STNG-A06045. The process is pretty much plug and play, the data will be displayed in the monitor after a few seconds.

3.2. OpenWind connection

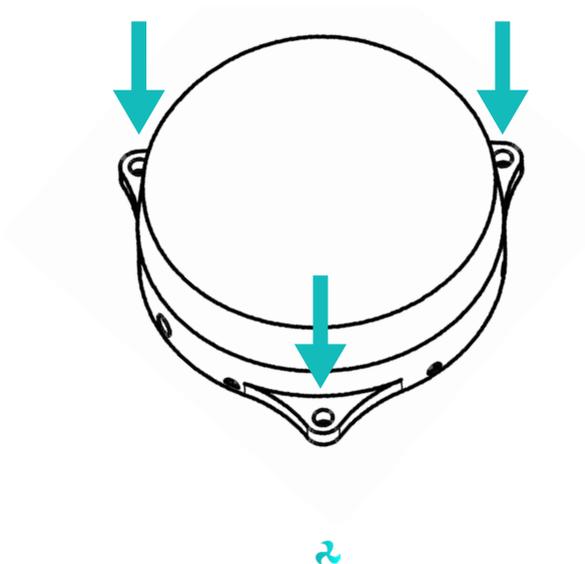
Make sure OpenWind is turned on (see the OpenWind User Manual for more instructions on how to set up the windmeter properly).

Make sure that **no other devices** are connected to Openwind.

The NMEAString should connect instantly.

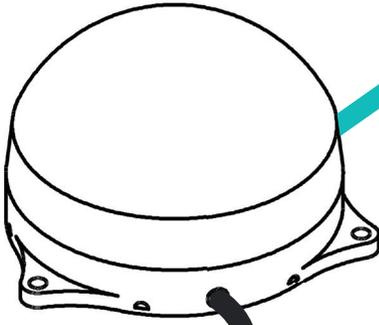
3.3. NMEAString assembly

Fix the device using M5 screws or blind rivets. In preference, install it close to the mast and in a place where it will not obstruct passing cables.

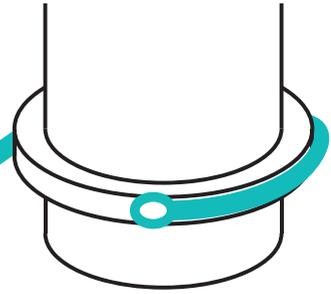


Attach the end of the string to the mast.

Ideally, the string should follow a circular path along the radius of the mast for maximum accuracy.



NMEA output



		Mast Angle	
First	-90	2640	<input type="button" value="Set"/>
Second	0	2606	<input type="button" value="Set"/>
Third	90	2564	<input type="button" value="Set"/>

AutoPoints

Use OW



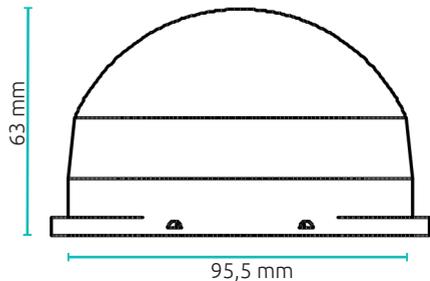
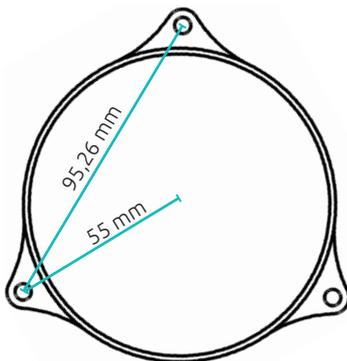
Calibrate all the 3 rotation angle values in the application.

For example, you can set the first reference point of the mast angle at the -90° position. Following by the 0° and 90° position.

This calibration process is only required once.

uncheck this option in the application to use the wind data from other wind instruments connected to your NMEA network.

3.4. Dimensions



4. TRANSPORTATION AND PACKAGING

4.1. Transportation

Please make sure that the NMEASring instrument is not subjected to impact during transport. This can damage the device. If necessary, transport the device in the original box or in a suitable container.

4.2. Packaging

If you do not wish to keep the original NMEASring packing material, please separate it according to the disposal requirements in your community for proper disposal and recycling.

5. MANUFACTURER WARRANTY

5.1. What is covered by this warranty

Liesenberg GmbH, Münsing, Bavaria, Germany warrants the NMEASring hardware product contained in the original packaging against defects in materials and workmanship when used normally in accordance with Liesenberg GmbH's published guidelines for a period of two (2) years from the date of original retail purchase by the end-user purchaser ("Warranty Period").

5.2. What is not covered by this warranty

This Warranty does not apply to any non-Liesenberg GmbH branded hardware products or any software, even if packaged or sold with Liesenberg hardware. Manufacturers, suppliers, or publishers, other than Liesenberg GmbH, may provide their own warranties to you – please contact them for further information. Liesenberg GmbH does not warrant that the operation of the Liesenberg GmbH's Product will be uninterrupted or error-free. Liesenberg GmbH is not responsible for damage arising from failure to follow instructions relating to the Liesenberg GmbH Product's use.

5.3. This Warranty does not apply:

(a) to consumable parts, such as batteries or protective coatings that are designed to diminish over time, unless failure has occurred due to a defect in materials or workmanship; (b) to cosmetic damage, including but not limited to scratches, dents and broken plastic on ports unless failure has occurred due to a defect in materials or workmanship; (c) to damage caused by use with a third party component or product that does not meet the Liesenberg GmbH Product's specifications; (d) to damage caused by accident, abuse, misuse, fire, liquid contact, earthquake or other external cause; (e) to damage caused by operating the Liesenberg GmbH's Product outside Liesenberg GmbH's published guidelines; (f) to damage caused by service (including



upgrades and expansions) performed by anyone who is not a representative of Liesenberg GmbH; (g) to an Liesenberg GmbH's Product that has been modified to alter functionality or capability without the written permission of Liesenberg GmbH; (h) to defects caused by normal wear and tear or otherwise due to the normal aging of the Liesenberg GmbH Product; (i) if any serial number has been removed or defaced from the Liesenberg GmbH Product; or (j) if Liesenberg GmbH receives information from relevant public authorities that the product has been stolen and you cannot prove in any way that you are the authorized user of the product (eg. by presenting proof of purchase).

5.4. What will Liesenberg GmbH do in the event the warranty is breached

If during the Warranty Period you submit a claim to Liesenberg GmbH in accordance with this warranty, Liesenberg GmbH will, at its option:

(i) repair the Liesenberg GmbH Product using new or previously used parts that are equivalent to new in performance and reliability, (ii) replace the Liesenberg GmbH Product with the same model (or with your consent a product that has similar functionality) formed from new and/or previously used parts that are equivalent to new in performance and reliability, or (iii) exchange the Liesenberg GmbH Product for a refund of your purchase price. Liesenberg GmbH may request that you replace certain user-installable parts. A replacement part or Liesenberg GmbH's Product, including a user-installable part that has been installed in accordance with instructions provided by Liesenberg GmbH, assumes the remaining term of the warranty or ninety (90) days from the date of replacement or repair, whichever provides longer coverage for you. When an Liesenberg GmbH's Product or part is replaced or a refund provided, any replacement item becomes your property and the replaced or refunded item becomes Liesenberg GmbH's property.

5.5. Limitation of liability

Except as provided in this warranty and to the maximum extent permitted by law, Liesenberg GmbH is not responsible for direct, special, incidental or consequential damages resulting from any breach of warranty or condition, or under any other legal theory, including but not limited to loss of use; loss of revenue; loss of actual or anticipated profits (including loss of profits on contracts); loss of the use of money; loss of anticipated savings; loss of business; loss of opportunity; loss of goodwill; loss of reputation; loss of, damage to, compromise or corruption of data; or any indirect or consequential loss or damage howsoever caused including the replacement of equipment and property, any costs of recovering, programming, or used with the liesenberg ug's product or any failure to maintain the confidentiality of information stored on the liesenberg ug's product.

The foregoing limitation shall not apply to death or personal injury claims, or any statutory liability for intentional and gross negligent acts and/or omissions. Liesenberg GmbH disclaims any representation that it will be able to repair any Liesenberg GmbH's product under this warranty or replace the Liesenberg GmbH's product without risk to or loss of information stored in the liesenberg ug's product.



REGULATORY

1.1. EU Compliance Statement



Liesenberg GmbH declares that this wireless device is in compliance with the essential requirements, Radio Equipment Directive 2014/53/EU and Electromagnetic Compatibility 2014/30/EU as applicable.

1.2. European Union—Disposal Information



The symbol above means that according to local laws and regulations your product and/ or its battery shall be disposed of separately from household waste. When this product reaches its end of life, take it to a collection point designated by local authorities. The separate collection and recycling of your product and/or its battery at the time of disposal will help conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment.

1. SAFETY

1.1. Software safety

If in any case the NMEAStrng Instrument firmware encounters a persistent issue on standby or in normal operation, it will automatically reset and boot itself.

This extra feature increases the device stability and makes it tougher for every environment or in any stress conditions. If this feature failed to work, disconnect the device to reboot the system manually.

1.2. Hardware safety

All assembly parts in the NMEAStrng instrument are stainless steel or corrosion free to make it more durable in harsh environments. To avoid injury during installation or maintenance, all edges of NMEAStrng were designed to be smoother and rounded.

EG Declaration of Conformity

Manufacturer: Liesenberg GmbH
Adresse: Am Buchberg 7, 82335 Berg, Germany
Product name: NMEASring

We declare under our sole responsibility that the above referenced product complies with the following:

Electromagnetic Compatibility 2014/30/EU
Radio Directive 2014/53/EU
Restriction of certain Hazardous Substances 2011/65/EU
Low Voltage 2014/35/EU

The following standards have been applied:

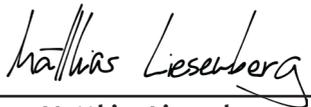
EN 61000-6-4:2007: Electromagnetic compatibility (EMC) - Generic standards - Emission standard for residential, commercial and light-industrial environments.

EN 62368-1:2016-05: Audio/video, information and communication technology equipment Part 1: Safety requirements.

Berg, June 05, 2022



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