



USER MANUAL

NMEA-2-WIFI

001-1037

AIS NMEA Interface to WIFI Network
Dual Input at 4800 and 38,400 Baud

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- The NMEA-2-WIFI Unit
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- This Manual

2 INSTALLATION

The NMEA-2-WIFI unit is not waterproof and should be installed in a dry location. The unit can be secured by the 4 mounting holes in the end flanges. It should ideally be installed in a location suitable for connection to power and NMEA cables, observing a compass safe distance of 0.5 m.

Choose the best location for WIFI transmission, ideally within sight of the device you wish to connect to.

Screw on the supplied antenna and set the orientation vertically.

2.1 Power Connection

Operation is from the boats DC supply of 12-24 Volts, connect power to the two terminals marked 12/24V Power, observing correct polarity. A switched fused supply is recommended with a fuse value of 1 Amp.

2.2 NMEA Connections

The NMEA-2-WIFI has two NMEA 0183 Inputs, one at 4800 baud, and one at 38,400 baud.

Any 4800 baud NMEA data such as from a GPS, Chart Plotter or Instruments can be connected to the NMEA INPUT 4800 terminals, observing the correct polarity. The unit can only be connected to one piece of equipment so choose the unit that has the most information that you require. If you have several pieces of equipment that you wish to receive data from then you may need to purchase a NMEA Multiplexer to combine all this data into one before connecting to the WIFI unit.

The 38,400 baud NMEA data input would normally be connected to an external AIS Receiver or Transponder, however it will also accept any other NMEA data at 38,400.

The NMEA Output is set to 38,400 baud and can be connected to a suitable Chart Plotter or AIS Transponder that will accept data in.

If the equipment that you are connecting to has a pair of NMEA cables, normally marked NMEA Output Positive and Negative these should go to the respective NMEA input on the WIFI unit.

If the equipment has only one Positive NMEA output wire this should go to the +NMEA Input and a wire from the -NMEA Input should then be taken to the common ground/negative of the other equipment.

NMEA-2-WIFI

3 OPERATION

On applying power the Green ON LED will light and the Green STATUS LED will flash slowly. If the units NMEA Inputs are connected to other equipment which are sending data then the Red DATA LED will flash, the frequency dependent on the amount of data being transferred.

3.1 WIFI Connection

The NMEA-2-WIFI unit creates a Wireless Access Point which enables another device to connect to it and share data.

To set up a WIFI connection is a two stage operation, firstly the WIFI device such as a smart phone or PC must be on the same network, and secondly it needs to be connected to the program that you are using.

With the unit powered on and connected to your NMEA equipment, scan for wireless networks on the device you wish to connect to. This procedure will vary between devices so consult the user manual of the device you are using.

The device will show a list of WIFI networks in range. On the list you will see a network with the name "NMEA-2-WIFI xxx" where xxx is a 3 digit number unique to your device. Connect to this network as per your devices instructions.

Once connected you need to run the application that accepts NMEA data over TCP/IP, configure the application to listen on:

IP Address 1.2.3.4 Port 2000

The Green STATUS LED should be on constantly to confirm a connection has been made.

4 TROUBLE SHOOTING

No green ON LED is displayed

- Check the power supply and that the unit is connected correctly to 12 or 24V DC supply.

No red DATA LED flashing

- Check that the NMEA equipment is switched on
- Check that the equipment is set to output NMEA data

Unable to see the NMEA-2-WIFI Network

- Move closer to the unit to improve radio reception

Unable to connect to the unit

- Retry connecting, initially the device may take a while to negotiate with the network, as a radio device, it is possible to suffer from interference in a busy marina, moving closer to the device will improve the signal and give a more reliable connection.

5 SPECIFICATION

Dimensions overall:	120 x 86 x 37mm
Power:	9-30V DC
Current:	100mA @ 12V DC
Input:	NMEA 0183 at 4800 and 38,400
Output:	NMEA 0183 at 38400
WIFI:	2.4GHz IEEE 802.11b/g
Transmit:	Output power +12dBm
Connections:	8-way Screw Terminals

NMEA-2-WIFI

6 LIMITED WARRANTY

Comar Systems Ltd warrants this product to be free from defects in materials and manufacture for one year from the date of purchase. Comar Systems Ltd will, at its sole option, repair or replace any components that fail in normal use. Such repairs or replacement will be made at no charge to the customer for parts and labour. The customer is, however, responsible for any transportation costs incurred in returning the unit to Comar Systems Ltd.

This warranty does not cover failures due to abuse, misuse, accident or unauthorised alteration or repairs.

The above does not effect the statutory rights of the consumer.

Note: Every effort has been made to ensure that all information contained in this manual is accurate at the time of going to press. We therefore cannot take any responsibility for the content of this manual and advise that you take normal steps to ensure that the information is at its most current when you are reading this manual.

7 PRODUCT SUPPORT

Comar Systems Limited
Vittlefields Technology Centre
Forest Road
Newport
Isle of Wight, PO30 4LY
United Kingdom

Telephone: +44 (0) 1983 828900

E-mail: techsupport@comarsystems.com

Internet: www.comarsystems.com