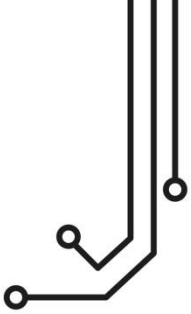
DIGITAL YACHT



NAVDOCTOR NMEA 2000 DIAGNOSTIC TOOL

Installation and instruction Manual

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Version 1.01

1. Introduction

Congratulations on the purchase of your NAVDoctor Wireless NMEA 2000 Diagnostic and Test tool. In addition to this quick start guide, we recommend watching this video https://www.youtube.com/watch?v=HfuUEdKeBX4

This product is designed for use by Technical Dealers and Installers with knowledge/experience of NMEA 2000, Digital Yacht cannot provide technical support or training on NMEA 2000 networking.

2. Before you start

To use your NAVDoctor you will need:

- A wireless device with web browser i.e. Smart Phone, Tablet or Laptop
- A spare "T-Piece" connection on a working/powered NMEA 2000 network.

3. Operation

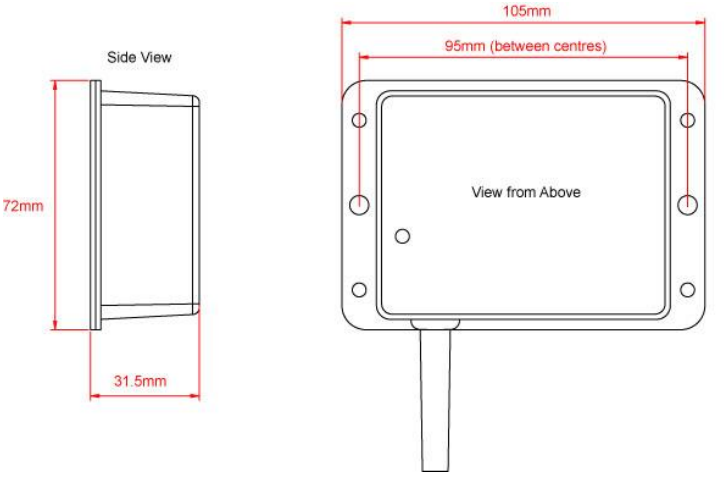
The NAVDoctor is IP54 rated (water resistant) and care should be taken when operating it, to ensure it is not submerged in water.

3.1 – Connecting to NMEA 2000 Network

- Connect the NAVDoctor cable, to a spare connector on the NMEA2000 network.
- NAVDoctor takes its power (LEN=2) from the NMEA2000 network so no additional connections are necessary.
- If you are connecting NAVDoctor to a non-standard NMEA2000 network, then a suitable adaptor cable will need to be sourced from the relevant manufacturer;
  - SeaTalkNG (Raymarine P/No A06045)
  - Simnet (Simrad P/No 24006199)

3.2 – Mounting

NAVDoctor is primarily designed to be portable, for use on different installations, as part of a marine technician's tool kit. However, on a larger vessel, NAVDoctor could be permanently installed to a flat bulkhead using suitable fixings. NAVDoctor can be installed in any orientation.



3.3 – Powering NAVDoctor

- Apply power to the NMEA 2000 network and the NAVDoctor LEDs should start to illuminate or flash, as per Table 1…

Condition	STATUS LED (Green)	DATA IN LED (Yellow)	ERROR LED (Red)	DATA OUT LED (Yellow)	LINK LED (Green)
ON (Solid)			System Error		TCP Connection
Fast Blink	No Wi-Fi connection	Data	Data Error	Data	
Slow Blink		Data	Network Error	Data	UDP Connection
OFF	Wireless device connected	No Data From N2K	All OK	No Data From App	No Power

Table 1

3.4 – Setting up the Wireless Network

- By default, NAVDoctor' creates a wireless network (Access Point), with Name (SSID) = "**NavDoctor-xxxx**" and Password = "**PASS-xxxx**", where xxxx is a four digit code, unique to your device.
- To connect to NAVDoctor you need to scan for wireless networks, find it, select it and then enter the default password when prompted.
- As soon as a wireless connection is established, the Status LED will stop flashing and stay permanently ON, whilst a wireless device is connected.

3.5 – Accessing the Web Interface

- The NAVDoctor has a built-in web interface, consisting of a series of pages that provide key information on the status of the NMEA 2000 network.
- A wireless device, connected to NAVDoctor, can access its web interface in a browser at http://192.168.1.1 or http://navdoctor.local which should bring up the NAVDoctor home page as shown in Figure 1.
- **IMPORTANT** – Only one device and one browser session at a time should be operated, otherwise strange conflicting commands can occur.

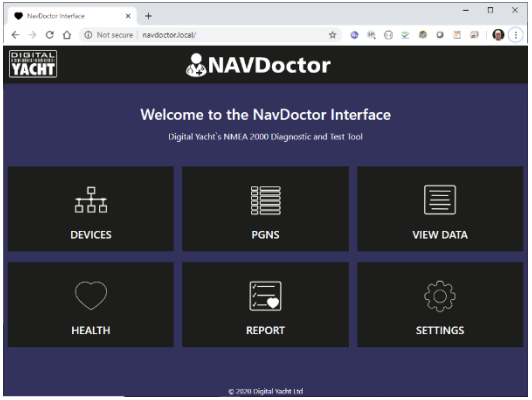


Figure 1

3.6 – Devices Page

- To display a list of all devices on the network, click on the **Devices** icon/button and you should see a page, similar to Figure 2.

- To access additional Product and/or Configuration information about a specific device, click the “Eye” icon at the end of its row.

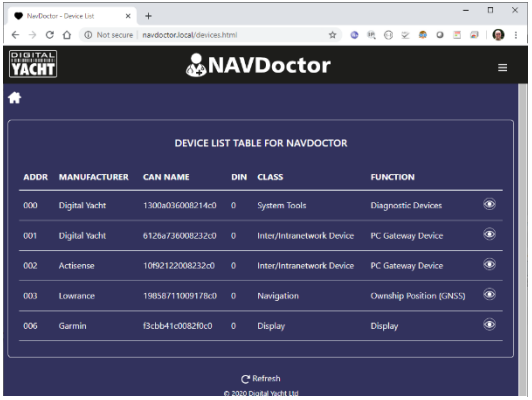


Figure 2

3.7 – PGNS Page

- To display all the PGNs being received, click on the **PGNS** icon/button and the table in Figure 3 will be displayed.
- To view the data of a specific PGN, click on the “Info” icon at the end of that PGN’s row.

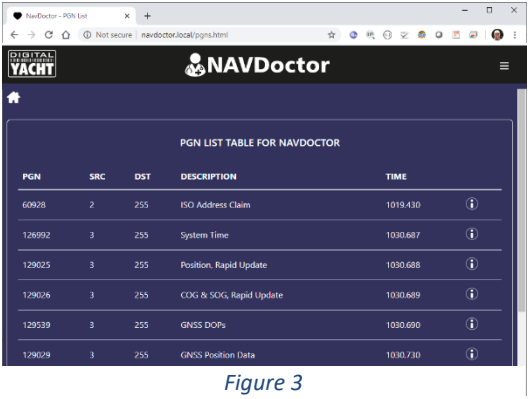


Figure 3

3.8 – View Data Page

- To display and log the raw NMEA 2000 data being received, click on the **View Data** icon/button and the page in Figure 4 will be displayed.

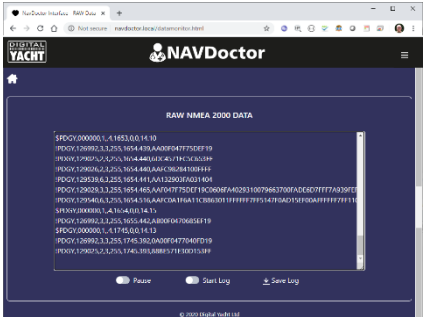


Figure 4

3.9 – Health Page

- To test the Health of the NMEA 2000 network click on the **Health** icon/button and the screen in Figure 5 will be displayed.

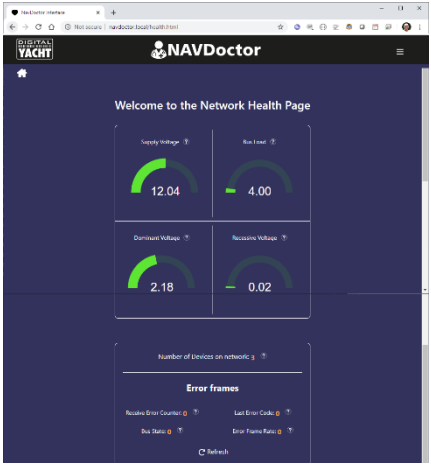


Figure 5

3.10 – Report Page

- To save/print the NAVDoctor test report for the network click on the **Report** icon/button and the screen in Figure 6 will be displayed.

Figure 6

4. Settings

By default NAVDoctor creates its own wireless network but if you are going to be using it in a workshop environment, where there is already a wireless network, you can make NAVDoctor join this network rather than create its own.

From the Home page, click on the **Settings** icon/button and in the Network Settings section at the top of the page select **Station** mode, see Figure 7.

Click the **Scan** button to scan for available wireless networks, select the network you want to join from the drop-down list, enter the wireless password and click the **Update Settings** button.

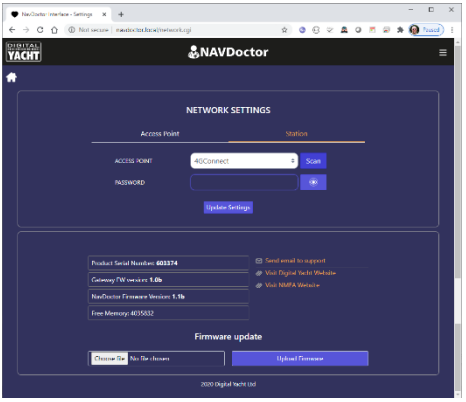


Figure 7

NAVDoctor will now display a window saying that the Wi-Fi settings have been changed and the unit will now reboot. On rebooting it will try to join the selected wireless network and if successful the Status LED will stop flashing a few seconds after booting up and stay permanently ON.

If you have any problems connecting to another network, press and hold the Reset button on the bottom edge of the unit for >10 seconds and NAVDoctor will reset to factory defaults.

Also, on the Settings page are the details of the Gateway and Wireless firmware versions and the free memory value. Updates to the wireless firmware can be done via the web interface – contact support@digitalyacht.co.uk for more information.

This Quick Start Manual just covers the very basic operation of NAVDoctor and a more detailed description is give in the training video at…

https://www.youtube.com/watch?v=HfuUEdKeBX4