

Fuel App Guide

ENGLISH



www.simrad-yachting.com

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About this manual

Product features

Features described and illustrated in this guide may vary from your display unit due to continuous development of the software.

Document version 001

For the latest version of this document in supported languages, visit: www.simrad-yachting.com/downloads/nsx.



ABOUT THE APP

The Fuel app presents a dashboard which helps track fuel consumption at a given speed and provides graphical insights on instantaneous fuel economy, and estimated range. You should use the app to record your fuel top ups for accurate data representation.

WARNING: If the MFD is used to calculate the remaining fuel, it must be turned on before the engines are running. This increases the accuracy of the remaining fuel displayed on the virtual tank.

REQUIREMENTS

Suitable hardware must be installed and commissioned on your vessel to display accurate information on the app.

Required hardware may include:

- Fluid level sensor
- Fuel flow rate sensor
- Navico fuel data manager (SKU 000-11522-001)*
- → Note: In this software release, a single fuel tank and tank level sensor are supported.

* **Optional** — If your vessel's engine has a built-in fuel data manager connected to the NMEA 2000[®] network to provide real-time fuel consumption data.



INITIAL SETUP

Total fuel capacity

The total fuel capacity of the vessel must be set up for the Fuel app to display accurate information. On launching the app for the first time, enter the total fuel capacity in the dialog box, then select **Set**.



If necessary, you can modify the total fuel capacity, simply navigate to **Settings > Vessel > Fuel capacity > Setup**.

Fluid level and fuel flow rate sensors

Install and connect a fluid level sensor and a fuel rate sensor to the NMEA 2000[®] network.

To configure these sensors, navigate to **Settings >Boat network > Devices**, locate the connected devices, then follow the setup wizard.



FUEL DASHBOARD



- 1 Economy graph shows instantaneous fuel economy.
- 2 Speed shows the current speed over ground derived from the GPS sensor.
- **3** Range shows the estimated instantaneous range available based on the speed, current fuel consumption rate, and available fuel.
- 4 Fuel data source
 - Select Rate sensor to see a calculated fuel level value based on current fuel burn rate.
 - Select Level sensor to see the current fuel level based on data from the tank level sensor.
- 5 Virtual tank level shows a graphical representation of the fuel remaining based on selection of rate sensor or level sensor.
- 6 Fuel level shows an approximate fuel capacity against the total fuel capacity and selection of rate sensor or level sensor.
- 7 Add fuel select to add the top-up refill fuel volume.
- 8 Fuel economy graph shows the current economy logged over time.
 A target economy (most economical state of the boat under average conditions) can be set.
 See baseline efficiency below.
- 9 Time selector select the time over which to see fuel consumption data.
- **10** Baseline efficiency select to set the baseline fuel economy of the engine(s), this appears as the **Target** line on the graph.



FUEL DATA SOURCE

Rate sensor

A (fuel) rate sensor captures data on fuel consumed by one or more engines.

Typically, a rate sensor is more accurate than a tank level sensor and in the fuel app, it is required to illustrate the fuel economy, range and fuel consumption graphs.

Remember to select Add fuel to record your fuel fills.

→ Note: A fuel data storage device is required, which records and stores fuel consumed even when the display unit is turned off. This device may be included with some engines. If required, we recommend you install a Navico Fuel Data manager (SKU 000-11522-001).

Level sensor

A (tank) level sensor captures data on the fuel level in the tank and this is illustrated on the virtual tank level.

Typically, a level sensor is less accurate than a rate sensor due to the tank shape or fuel movement in the tank.

ECONOMY INDICATOR

The economy indicator shows the current fuel economy of the vessel as indicated numerically and by a colored ring. The ring color changes based on the proximity to the pre-set baseline efficiency (target economy).



Green - Best economy Vessel is running at or close to the target economy.



Blue - Good economy Vessel is running less efficiently than target economy.



Red - Poor economy Vessel is running inefficiently compared to target. Vary throttle and check target efficiency.

→ Note: Navigate to Settings > Preferences > Economy to set up economy units.



CURRENT TRIP GRAPH

The current trip graph shows the current economy logged over time.



- A Fuel economy level (vertical axis)
- B Fuel economy line
- C Select a point on the fuel economy line to see the historic value
- D Range selector select a time range for the graph.
- ${\bf E}$ $% = {\bf E}$ Average fuel economy line this is an average of the highest and lowest fuel economy over the selected time (D).
- F Target economy line (see further below)
- G Time range (horizontal axis)

Target economy

Target economy is the most economical state of the vessel's engines under normal operating conditions.

The **Target** economy line is based on the value set in the **Baseline efficiency** dialog. Select the menu button (1), then add the economy value (2), and select **Set** (3).



RECORDING FUEL FILLS

It is important to record fuel fills if you use a fuel rate sensor to measure fuel economy and synchronize the app's virtual tank with the fuel volume in the physical tank(s).

The system suggests the amount of fuel required for a full tank (**A**), this is a calculated value based on historic fuel consumption data.

Select Add fuel (1) to see the Add fuel dialog. Select the fuel quantity field (2) and input the fuel volume.

You can partially top up the fuel tank and record the top up volume, however, we suggest you fill the tank to full capacity, and select **Set to full (2A**).

Fuel

Rte sensor

B95 / 1250 L

O/ 1250 L

Control

Select Update level (3) to complete recording your fuel fill.

Select **Reset statistics** to reset all fuel economy data. This does not impact your fuel tank capacity settings.



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