FoodStar Release Notes

The latest version of FoodStar, V3.75 contains a number of new features and enhancements.

This document includes a description of the new features, the date when they were added and a reference to the chapter number of each User Manual where the additions can be found.

Contents

1. Battery Calculations

The voltage characteristics of the batteries used in our recorders make it almost impossible to measure the energy available in the batteries, therefore we estimate the energy consumption by calculation. All the energy consuming functions of the recorder, like sleep, decay, running (microprocessor awake), measurements and saving data are measured beforehand and used in our calculations. The calculations are performed by the application software's, SeaStar, Mercury and FoodStar. The recorders themselves do not perform any energy calculations, but in order to start the recorder in one computer and retrieve data in another while still having the battery energy information, they carry the percentage of remaining energy with them in a register file (in the RID). At the time the recorder is in production (when the battery is new) the energy number is set to 100%.

Each time the recorder is started up in a new measurement sequence, the energy consumption, since last sequence-start, is calculated and subtracted from the energy number retrieved from the recorder, and this new **energy-left** number is downloaded into the recorder.

The **energy-left** register in the recorder can be corrupted for reasons such as:

- The CRC check is turned off when connecting to the recorder and a communication error occurs
- When a write error occurs when starting up a new sequence or updating a status to the recorder and a reconnection is performed instead of performing the operation again.
- Energy estimation calculations are not in accordance with actual energy consumption.

To change/correct the battery energy numbers in the recorder, an easier alternative to the recorder backup option is now available to the user with the **Change battery life** wizard.

Added: 03/02/2012

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2. Change battery life wizard

A new wizard has been added to the **Wizards** menu, the **Change battery life** wizard.

Choose the **Wizards** menu and the **Change battery life** command to enter the Change battery life wizard (see figure 1).

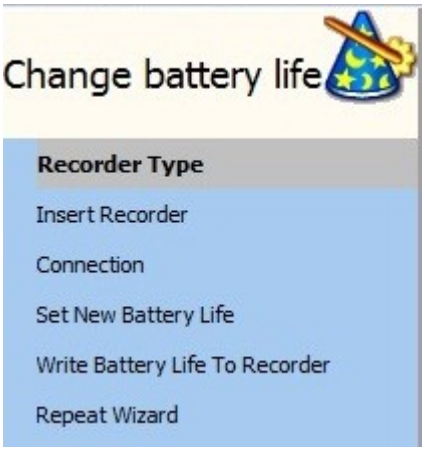

Figure 2 Change battery life

Select the recorder type and insert the recorder in the Communication Box. Once a connection has been established a window appears (see figure 1.1). If the recorder is already on-line then the wizard will start in step 4 (**Set New Battery Life**).

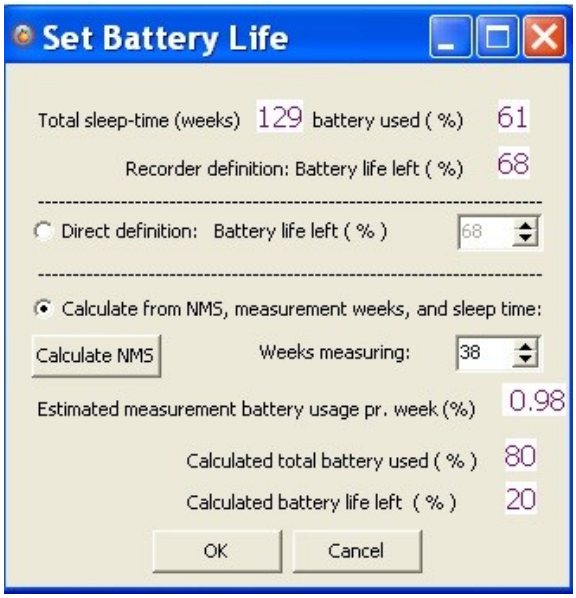

Figure 2.1 Set Battery Life

The top line shows who long the recorder has been in use since (last) calibration, and how much energy sleep and decay combined have used up over that time.

The second line shows **Battery left** based on the register in the recorder.

There are two ways to set the battery life, **Direct definition** and **Calculate from NMS**.

Direct definition:
Check the **Direct definition** option and set the battery life (in %) manually based on for example, the last known "good" value and an estimated/guessed value on energy used since then. The user can also refer to other same type recorders working under similar conditions.

Calculate from NMS:
Check the **Calculate from NMS** option and click on **Calculate NMS**. The user is now transferred to the **Set New Measurement Definition** window where a sequence can be defined. Once the measurement sequence has been defined an **Estimated measurement battery usage pr week (%)** is calculated and shown in the **Set New battery Life** window, note that sleep and decay energy use is included in this number. Also the **Calculated total battery used (%)**, which is based on the NMS definition times number of weeks, plus the energy used by sleep and decay.

Now insert for how many weeks the recorder (since produced) has been measuring. Each time the number of weeks is changed, the **Calculated total battery used(%)** is recalculated, note that the **Calculated total battery used(%)** value will not show a directly weeks * energy pr week, as the sleep + delay values must be accounted for.

Added: 03/02/2012

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3. View Data

In the **Settings** menu the command **ReConversion** has been changed to **View Data** (see figure 3).

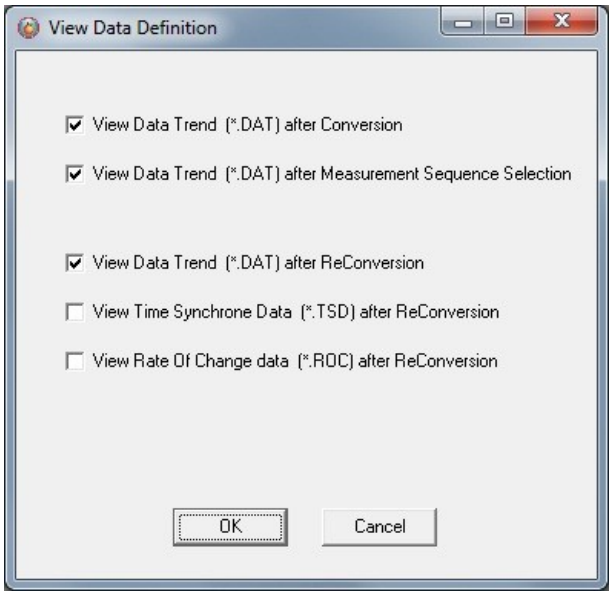

Figure 3 View Data

Added: 03/02/2012

• **User Manual**	• **Chapter**
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