Ballast-Check™ 2 – Quick Start Guide

This Quick Start Guide will help you use the Ballast-Check 2 to quickly assess the risk of gross exceedance of the discharge standard for ballast water samples. For more details on Ballast-Check 2 please refer to the user manual.

PLEASE SET LOCAL DATE AND TIME BEFORE PROCEEDING.

Turn the Ballast-Check 2 ON and wait 5 seconds, press the DATA button, use the down arrow key to select SET DATE/TIME and press ENTER.
1) Select Date, press ENTER and use the arrow keys to set the Date as MM/DD/YYYY, press ENTER when finished
2) Select Time, press ENTER and use the arrow keys to set the Time as HH:MM, press ENTER when finished

1. Setting Ship and Tank Values

Prior to reading a sample, Ship and Tank labels need to be set.
To set SHIP label; switch on the instrument and press SHIP whilst on the HOME screen.
1. Use the left/right arrow keys to scroll to the first desired space.
2. Use the up/down arrow keys to cycle through alpha-numeric values 0-Z and then scroll to the next desired space.
3. Press ENTER when done. This label is displayed with the data output for each measurement.
To set TANK name; press TANK whilst on the HOME screen.
1. Use the left/right arrow keys to scroll to the first desired space.
2. Use the up/down arrow keys to cycle through alpha-numeric values 0-Z and then scroll to the next desired space.
3. Press ENTER when done. This label is displayed with the data output for each measurement.

2. Sampling Procedure

Read section 3 Sample Analysis Guidelines in the user manual before proceeding.
1. Aspirate a small amount of sample into your 60cc syringe to rinse any residual from your previous sample and purge all the water from the syringe.
2. Aspirate 50cc's of sample into your 60cc syringe.
3. Using the sample in your syringe, rinse a glass cuvette 3 times, then fill the cuvette ¾ full.
4. Dry and clean all faces of the cuvette using Kim Wipes.
5. Insert the cuvette into your Ballast-Check 2 and close the lid.
6. Turn the Ballast-Check 2 on with the ON/OFF button and wait for 5 second warm up.
7. Press READ.
8. Confirm SHIP/TANK values are OKAY by selecting YES and pressing ENTER
9. Press READ and the measurement will begin.
   a. If LOW risk is displayed, the measurement is complete. You can see values for that sample by pressing the down arrow key.
   b. If the sample has a HIGH risk, you will be prompted to insert a 10 micron sample.
10. Remove the cuvette from your Ballast-Check 2 and discard the sample.
11. Attach a 10 micron filter to your 60cc syringe, and using the remaining sample in your syringe, rinse the glass cuvette 3 times, then fill the cuvette ¾ full with your 10 micron filtered sample.
12. Dry and clean all faces of the cuvette using Kim Wipes.
13. Insert the cuvette into your Ballast-Check 2 and close the lid.
14. Press READ
15. Results will be displayed as HIGH or LOW risk. ABUNDANCE and ACTIVITY values can be viewed by pressing the down arrow key.
16. Note the readings on your log sheet. Measurement is complete, remove the cuvette and discard the sample.
17. Remove the 10 micron filter from your 60cc syringe and discard the sample remaining in the syringe. Rinse the syringe three times with deionized or distilled water.
18. Using the filter washing kit, back wash the 10 micron filter with a clean water source such as deionized or distilled water to prepare it for reuse or storage. **See Filter Washing section.**
When finished viewing data, or if ready to run the next sample, press ESC to return to the HOME screen and repeat the sampling procedure.
Note*: It is recommended you repeat the above steps 3 times. If you see inconsistent results, please refer to the Sample Analysis Guidelines in Section 4.2 of Ballast-Check 2 Manual.*

3. Filter Washing

The 10 micron filters are made from nylon mesh (10 micron mesh size) and are used to filter out greater than 10 micron cells. When the Ballast-Check 2 displays HIGH risk for samples, you will be asked to insert a 10 micron sample. **See sampling procedure, steps 9b-12, for instructions on how and when to filter using the 10 micron filters.**

We recommend back washing the 10 micron filters after each use to clean any debris or organisms trapped after a filtering event. We also recommend back washing the filters after use, prior to storage, to avoid salt from crystallizing onto the filter. To wash the filters properly:

1. Attach one end of the tubing to the 5cc syringe; both are included in the Filter Washing Kit.
2. Fill the syringe with clean water (deionized or distilled) by pulling water through the tubing.
3. Attach the other end of the tubing to the outflow port of the 10 micron filter housing.
4. Make sure there is nothing attached to the inflow port of the 10 micron filter housing.
5. Flow all the water in the syringe through the filter housing.

Repeat as necessary as determined by visual inspection. This should effectively clean the 10 micron filter, ensuring all particles or organisms trapped by the filtering event are purged from the nylon mesh. If the nylon mesh appears to be dirty after cleaning discard it and use a new filter assembly.

4. Viewing Data

Stored data results can be viewed on the Ballast-Check 2 by using the arrow keys.

1. Press the ESC button.
2. If you wish to view results for a specific sample, toggle to that sample using left/right arrow keys. The sample no. is displayed in the bottom right corner of the screen.
3. When the required sample is displayed use the down key to show the results for that sample.

Refer to the Ballast-Check 2 manual on how to clear data from the memory.